| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
|-------|------|--------------|-----|------------------|---------|------------|
| L1 | 4011 | (human-machine adj interface) or (human adj machine adj interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L2 | 623 | L1 navigation | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L3 | 230 | L2 and node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L4 | 416 | 700/20.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L5 | 1728 | 700/83.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L6 | 0 | 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L7 | 777 | 715/854.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L8 | 777 | 715/854.ccls. or 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L9 | 2852 | 715/854.ccls. or 715/514.ccls. or 700/83.ccls. or 700/20.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

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|---|---|---|---|---|---|---|
| L10 | 111 | L9 and (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L11 | 5609 | (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L12 | 17 | HMI adj editor | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L13 | 122 | (HMI adj editor) or (Human Machine Interface adj editor) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L14 | 18 | (HMI adj editor) or (Human adj Machine adj Interface adj editor) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L15 | 70 | ((HMI adj editor) or ((Human adj Machine adj Interface) adj editor) or (man adj machine adj interface)) and (user adj screen) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L16 | 7 | 09/607369 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L17 | 14 | ((HMI adj editor) or ((Human adj Machine adj Interface) adj editor)) and hierarch$7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L18 | 14 | ((HMI adj editor) or ((Human adj Machine adj Interface) adj editor)) and hierarch$7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L19 | 11 | L18 and zoom$6 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L20 | 88 | ((HMI) or (Human adj Machine adj Interface)) and hierarch$7 and zoom $5 and (render or supply or provide or furnish or yield or return or give, or deliver or depict or show or display) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|---|---|---|---|---|---|---|
| L21 | 419 | (HMI or (Human adj Machine adj Interface)).ti. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L22 | 33 | (HMI or (Human adj Machine adj Interface)).ti. and hierarc$10 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L23 | 67 | (HMI or (Human adj Machine adj Interface)).ab. and hierarc$10 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L24 | 12 | L23 and leaf and node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L25 | 3 | L23 and leaf and node zoom | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L26 | 439 | (715/771).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L27 | 35 | (715/771).ccls. and (715/763).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L28 | 22 | (715/771).ccls. and (715/762).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L29 | 5 | (715/771).ccls. and (715/762).ccls. and hierarch$9 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L30 | 6 | ("5301301" \| "5592600" \| "6054986" \| "6437805" \| "6449624" \| "6593947"). PN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:25 |
|---|---|---|---|---|---|---|
| L31 | 561 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and specification | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L32 | 561 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and (specification) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L33 | 33 | ("5042002" "5093794" "5377309" "5398336" "5412756" "5548756" "5787438" "5815539" "5911143" "5920711" "5943675" "6028819" "6081750" "6108662" "6157864" "6161051" "6167406").pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/05/12 06:25 |
| L34 | 17 | ("5042002" "5093794" "5377309" "5398336" "5412756" "5548756" "5787438" "5815539" "5911143" "5920711" "5943675" "6028819" "6081750" "6108662" "6157864" "6161051" "6167406").pn. | US-PGPUB; USPAT | OR | ON | 2008/05/12 06:25 |
| L35 | 4 | L34 and zoom | US-PGPUB; USPAT | OR | ON | 2008/05/12 06:25 |
| L36 | 27 | providing screen navigation editor linked hierarch$9 HMI screen node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L37 | 51 | providing screen navigation editor hierarch $9 (HMI or (Human adj Machine adj Interface)) screen node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L38 | 716 | (715/762).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L39 | 3 | editor hierarch$9 (root adj node) (specification or Specify) with (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L40 | 4 | editor hierarch$9 (root adj node) (specification or Specify) SAME (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|---|---|---|---|---|---|---|
| L41 | 121 | (715/771).ccls. and node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L42 | 25 | L41 and root | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L43 | 15 | L42 and specification | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L44 | 128 | (715/771).ccls. and hierarch$9 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L45 | 30 | (715/771).ccls. and hierarch$9 root | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L46 | 444 | hierarch$9 (root adj node) editor navigation | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L47 | 436 | L46 and interface | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L48 | 139 | L47 industrial | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L49 | 6543 | hierarch$9 (root adj node) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L50 | 3768 | L49 and specification | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L51 | 2820 | L50 relationship | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L52 | 1425 | L51 arrangement | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L53 | 25 | L49 and 715/762.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L54 | 5 | L52 and 715/762.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L55 | 25 | Specify adj root adj node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L56 | 11 | zoom and HMI adj editor | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L57 | 197 | zoom and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L58 | 28 | second adj screen and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L59 | 28 | (second adj screen) and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L60 | 912 | 700/17.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| --- | --- | --- | --- | --- | --- | --- |
| L61 | 1155 | 700/204.ccls. or 700/15-17. ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L62 | 1402 | button and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L63 | 6 | first adj (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L64 | 4011 | (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L65 | 964 | L64 node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L66 | 735 | L64 node link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L67 | 276 | L64 node same link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L68 | 117 | L67 and hierarch$7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L69 | 346 | (Human adj Machine adj Interface) and editor | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L70 | 160 | (Human adj Machine adj Interface) and navigating | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L71 | 623 | (Human adj Machine adj Interface) and navigation | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L72 | 384 | L71 and links | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L73 | 86 | L71 and linking | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L74 | 56 | L73 and edit$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L75 | 37 | hierarch$9 (root adj node) (specification SAME (HMI or ((human-machine adj interface) or (human adj machine adj interface)))) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L76 | 454 | hierarch$9 specification and (HMI or (human-machine adj interface) or (human adj machine adj interface)) link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L77 | 51 | hierarch$9 specification and (HMI or (human-machine adj interface) or (human adj machine adj interface)) SAME link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L78 | 28 | hierarch$9 specification and (HMI or (human-machine adj interface) or (human adj machine adj interface)) WITH link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L79 | 255 | creat$5 WITH (HMI or (human-machine adj interface) or (human adj machine adj interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L80 | 79 | L79 and hierarc$10 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|-----|-----|-----|-----|-----|-----|-----|
| L81 | 98 | (HMI or (human-machine adj interface) or (human adj machine adj interface)) adj screen | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L82 | 2 | "6618856".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L83 | 11 | 2002/0120921 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L84 | 2 | "20020120921".did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L85 | 2 | "6421571".did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L86 | 12 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and leaf parent collision | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L87 | 50 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and leaf obtaining | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L88 | 777 | 715/854.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L89 | 0 | 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L90 | 1728 | 700/83.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|-----|------|--------------|-------------------------------------------------------|-----|-----|------------------|
| L91 | 88 | 715/726.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L92 | 1728 | 700/83.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L93 | 0 | 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L94 | 9 | "6055369".pn. "6407758".pn. "5812135".pn. "5911145".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/05/12 06:25 |
| L95 | 2 | ("20020120921").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2008/05/12 06:25 |
| L96 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L97 | 13 | (US-20020120921-$).did. or (US-6975914-$ or US-6889096-$ or US-6754885-$ or US-6054986-$ or US-4914568-$ or US-5301301-$ or US-6618856-$ or US-5386459-$ or US-6862105-$ or US-5566333-$ or US-5911145-$ or US-7017116-$ or US-6549221-$ or US-6684264-$).did. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:25 |
| L98 | 122 | (HMI adj editor) or (Human Machine Interface adj editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L99 | 80 | (HMI with editor) or ((Human Machine Interface) with editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|---|---|---|---|---|---|---|
| L100 | 54 | ("HMI" with editor) or ((Human adj Machine adj Interface) with editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L101 | 115 | ("HMI" with edit$3) or ((Human adj Machine adj Interface) with edit$3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L102 | 3 | (("HMI" with edit$3) or ((Human adj Machine adj Interface) with edit$3)) collision | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L103 | 318 | (("HMI") or ((Human adj Machine adj Interface))) collision | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L104 | 2 | (("HMI") or ((Human adj Machine adj Interface))) (collision near3 node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L105 | 4 | (("HMI") or ((Human adj Machine adj Interface))) (collision with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L106 | 7 | (("HMI") or ((Human adj Machine adj Interface))) (node near (intersect$3 or overlap$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L107 | 16 | (("HMI") or ((Human adj Machine adj Interface))) (node near3 (intersect$3 or overlap$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L108 | 20 | (("HMI") or ((Human adj Machine adj Interface))) (node with (intersect$3 or overlap$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|------|-----|------|------|-----|-----|------|
| L109 | 2 | (("HMI") or (Human adj Machine adj Interface)) (leaf with parent) ((intersect$3 or overlap$3 or collide or collision) same (leaf or parent or node )) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L110 | 1825 | ((monitoring or program$4 or controll$3) with ((automation near2 machine) or (automation near2 process$3))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L111 | 162 | L110 (screens)! | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L112 | 48 | L111 tree | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L113 | 45 | L112 node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L114 | 31 | L113 parent | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L115 | 5 | L114 (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L116 | 5 | L111 tree (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L117 | 25 | L110 (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|------|-----|-------------------------|---------------------------------------------------------|-----|-----|--------------------|
| L118 | 203 | ("20040205726" "20040015928" "20040205536" "20040205535" "20040163046" "20050243735" "20050063337" "20050116953" "20050038533" "20040006744" "20040003348" "20040006614" "20040015486" "20040024625" "20060155654" "20040032422" "20040044636" "20040044702" "20040053645" "20040064556" "20040064523" "20040064522" "20042005594" "20040068521" "20040068491" "20040073579" "20040073659" "20040078264" "20050188108" "20040085912" "20040085347" "20040085329" "20040088294" "20040085367" "20040088678" "20040088305" "20040059522" "20040059521" "20040093560" "20040098474" "20060143202" "20040012641" "20040012640" "20040111711" "20040210464" "20040117336" "20040122789" "20040003349" "20040119753" "20040119743" "20040064802" "20040139080" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2008/05/12 06:25 |

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| L119 | 102 | ("20040205726"<br>"20040015928"<br>"20040205536"<br>"20040205535"<br>"20040163046"<br>"20050243735"<br>"20050063337"<br>"20050116953"<br>"20050038533"<br>"20040006744"<br>"20040003348"<br>"20040006614"<br>"20040015486"<br>"20040024625"<br>"20060155654"<br>"20040032422"<br>"20040044636"<br>"20040044702"<br>"20040053645"<br>"20040064556"<br>"20040064523"<br>"20040064522"<br>"20040205594"<br>"20040068521"<br>"20040068491"<br>"20040073579"<br>"20040073659"<br>"20040078264"<br>"20050188108"<br>"20040085912"<br>"20040085347"<br>"20040085329"<br>"20040088294"<br>"20040085367"<br>"20040088678"<br>"20040088305"<br>"20040059522"<br>"20040059521"<br>"20040093560"<br>"20040098474"<br>"20060143202"<br>"20040012641"<br>"20040012640"<br>"20040111711"<br>"20040210464"<br>"20040117336"<br>"20040122789"<br>"20040003349"<br>"20040119753" | US-PGPUB | OR | ON | 2008/05/12<br>06:25 |

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|---|---|---|---|---|---|---|
| L120 | 13 | L119 overlap | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |
| L121 | 21 | (intersect$3 or overlap$3<br>or collide or collision) L118 | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |
| L122 | 1 | (intersect$3 or overlap$3<br>or collide or collision) L118<br>(updat$3 with position) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |
| L123 | 38 | (intersect$3 or overlap$3<br>or collide or collision) L110<br>(updat$3 with position) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |
| L124 | 3 | L110 (intersect$3 or<br>overlap$3 or collide or<br>collision) ((updat$3 with<br>position) same node) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |
| L125 | 3 | (("HMI") or ((Human adj<br>Machine adj Interface)))<br>(intersect$3 or overlap$3<br>or collide or collision)<br>((updat$3 with position)<br>same node) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |
| L126 | 8724 | ((monitoring or program$4<br>or controll$3) same<br>((automation with<br>machine) or (automation<br>with process$3))) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:25 |

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|---|---|---|---|---|---|---|
| L127 | 3 | L126 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L128 | 2 | ScreenNavNodes | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L129 | 13957 | (("HMI") or ((Human adj Machine adj Interface))) or L126 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L130 | 3 | L129 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L131 | 3 | L129 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L132 | 44 | L129 ((intersect$3 or overlap$3 or collide or collision) same parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L133 | 130 | L129 ((intersect$3 or overlap$3 or collide or collision) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L134 | 23092 | (("HMI") or (Human adj Machine adj Interface) or (Supervisory adj Control)) or L126 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L135 | 53 | L134 ((intersect$3 or overlap$3 or collide or collision) same parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L136 | 115 | L134 ((intersect$3 or overlap$3 or collide or collision) with (parent or child or node)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|------|-----|------|------|-----|-----|------|
| L137 | 53 | L134 ((intersect$3 or overlap$3 or collide or collision) with (parent or child or node)) tree | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L138 | 9 | L134 ((intersect$3 or overlap$3 or collide or collision) with (parent or child or node)) tree visibility | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L139 | 3 | tree (node with visibility) (("HMI") or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L140 | 113 | 715/965.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L141 | 205 | 715/967.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L142 | 81 | L141 node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L143 | 33 | L141 node parent | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L144 | 7 | L141 parent adj node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |

| L145 | 2 | L141 (parent adj node) (intersect$3 or overlap$3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
|---|---|---|---|---|---|---|
| L146 | 3 | (715/964.ccls. or 715/965. ccls. 715/966.ccls. 715/967. ccls. 715/969.ccls. 715/970. ccls.) (parent adj node) (intersect$3 or overlap$3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L147 | 7 | (715/964.ccls. or 715/965. ccls. or 715/966.ccls. or 715/967.ccls. or 715/969. ccls. or 715/970.ccls.) AND ((intersect$3 or overlap$3 or collide or collision) with node) AND (intersect$3 or overlap$3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L148 | 12 | (updat$3 with hierarchy) (node with spacing) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L149 | 12 | (updat$3 with hierarchy) (node with spacing) parent | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L150 | 4 | "screen navigation editor" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L151 | 1 | 2004-315841.NRAN. | DERWENT | AND | ON | 2008/05/12 06:25 |
| L152 | 17 | Human machine interface screen naviga$4 config$5 designing collection linked hierarchically organized screen nodes HMI editor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:25 |
| L153 | 33 | Human machine interface screen navigat$3 config$5 design$3 collection link$3 hierarchical$2 organiz$2 screen node HMI editor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L154 | 25 | Human machine interface screen navigat$3 config$5 design$3 collection link$3 hierarchical$2 organiz$2 screen node HMI editor ((intersect$3 or overlap$3 or collide or collision) or (drag near3 drop)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|------|-----|-----|-----|-----|-----|-----|
| L155 | 4 | Human machine interface screen navigat$3 config$5 design$3 collection link$3 hierarchical$2 organiz$2 screen node HMI editor (drag near3 drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L156 | 10 | hierarchical$2 node tree HMI editor (drag near3 drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L157 | 7 | hierarchical$2 node tree HMI editor (drag near3 drop) (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L158 | 2 | hierarchical$2 node tree HMI editor (drag near3 drop) (parent with updat $3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L159 | 2 | hierarchi$5 node tree HMI editor (drag near3 drop) (parent with (updat$3 or refresh or recreate or restore or regenerate or correct)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L160 | 5 | hierarchi$5 tree HMI (drag near3 drop) (node with (updat$3 or refresh or recreate or restore or regenerate or correct)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L161 | 5 | hierarchi$5 tree HMI (drag near3 drop) (node with (updat$3 or refresh$3 or recreat$3 or restor$3 or regenerat$3 or correct$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L162 | 0 | hierarchi$5 tree HMI (drag near3 drop) near3 (over or "on" or "top of")(node with (updat$3 or refresh$3 or recreat$3 or restor$3 or regenerat$3 or correct$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|------|-----|------|------|------|------|------|
| L163 | 100 | hierarchi$5 tree (drag near3 drop) (node with (placement or arrangment or layout )) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L164 | 639 | hierarchi$5 tree (automatic $4 with parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L165 | 47 | hierarchi$5 tree (drag near3 drop) (node with (placement or arrangment or layout )) (collide or collision or intersection) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L166 | 25 | hierarchi$5 tree (drag near3 drop) (node with (placement or arrangment or layout )) ((collide or collision or intersection) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L167 | 27 | hierarchi$5 tree (drag near3 drop) (automatic$4 with parent) (collide or collision or intersection) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L168 | 11 | hierarchi$5 tree (drag near3 drop) (automatic$4 with parent) ((collide or collision or intersection) with (node or parent or child or leaf)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L169 | 21 | hierarchi$5 tree (drag near3 drop) (automatic$4 with (node or parent or child or leaf)) ((collide or collision or intersection) with (node or parent or child or leaf)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L170 | 18 | hierarchi$5 tree (drag near3 drop) (automatic$4 with (node or parent or child or leaf)) ((collide or collision or intersection) near4 (node or parent or child or leaf)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|---|---|---|---|---|---|---|
| L171 | 1 | hierarchi$5 tree (drag near3 drop) (automatic$4 with position with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L172 | 1 | hierarchi$5 tree (drag near3 drop) (automatic$4 with ($3position$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L173 | 4 | hierarchi$5 tree (drag near3 drop) (automatic$4 with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or (re adj locate) or (re adj locating) or order$3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting)) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L174 | 13 | hierarchi$5 tree (drag near3 drop) ((automatic$4 or recursiv$2 or spontaneous$2 or automated or reflexivly or impulsivly or voluntarly) with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or (re adj locate) or (re adj locating) or order$3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

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|---|---|---|---|---|---|---|
| L175 | 13 | hierarchi$5 tree (drag near3 drop) ((automatic$4 or recursiv$2 or spontaneous$2 or automated or reflexivly or impulsivly or voluntarly) with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or situat$3 (re adj distrib$5) or (re adj locate) or (re adj locating) or order $3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L176 | 13 | hierarchi$5 tree (drag near3 drop) ((automatic$4 or recursiv$2 or spontaneous$2 or automated or reflexivly or impulsivly or voluntarly) with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or situat$3 (re adj distrib$5) or (re adj locate) or (re adj locating) or order $3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3 or distribut$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L177 | 81 | tree (node adj editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L178 | 9 | tree (node adj editor) layout | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L179 | 39 | tree (node adj editor) ((layout or position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or situat$3 (re adj distrib$5) or (re adj locate) or (re adj locating) or order $3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3 or distribut$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L180 | 394 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L181 | 320 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L182 | 319 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally parent (child or leaf) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L183 | 320 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L184 | 471 | edit$3 (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L185 | 46 | edit$3 (position or location or layout or collection or arrangement) tree horizontal vertical ((spacing or distanced or distancing) same node) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L186 | 1374 | 345/440.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|------|------|---------------|------|-----|-----|------|
| L187 | 71 | (editing tree).ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L188 | 106 | (edit$3 tree).ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L189 | 1 | 1990-101229.NRAN. | DERWENT | AND | ON | 2008/05/12 06:26 |
| L190 | 0 | 345/440.ccls. 715/514.ccls. 715/764.ccls. 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L191 | 43 | 345/440.ccls. 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L192 | 0 | 345/440.ccls. 715/514.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L193 | 43 | 345/440.ccls. 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L194 | 2 | (update adj parent) node tree leaf spacing | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L195 | 21 | (update adj parent) node tree leaf distance | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
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| L196 | 1 | (updating adj parent) node tree leaf spacing | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L197 | 11 | (updat$3 near3 parent) node tree leaf spacing | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L198 | 19 | (US-20030191608-$ or US-20020120921-$).did. or (US-6259458-$ or US-6054986-$ or US-5606654-$ or US-5432897-$ or US-5386459-$ or US-6067477-$ or US-6975914-$ or US-6889096-$ or US-6754885-$ or US-6618856-$ or US-7017116-$ or US-4914568-$ or US-5301301-$ or US-6862105-$ or US-6144962-$ or US-5911145-$ or US-5870559-$ or US-6549221-$ or US-6684264-$).did. or (JP-05307476-$).did. | US-PGPUB; USPAT; JPO | AND | ON | 2008/05/12 06:26 |
| L204 | 1158 | ("20010034659" \| "20020022900" \| "20030004874" \| "20030176940" \| "20030177046" \| "20030181991" \| "20040046997" \| "3665172" \| "3810119" \| "3825905" \| "4006464" \| "4064394" \| "4096566" \| "4141066" \| "4276593" \| "4302820" \| "4312068" \| "4315315" \| "4323966" \| "4347563" \| "4399513" \| "4410942" \| "4413314" \| "4423486" \| "4428044" \| "4435762" \| "4443861" \| "4455619" \| "4456997" \| "4466098" \| "4471457" \| "4488226" \| "4493027" \| "4524421" \| "4546435" \| "4570217" \| "4609995" \| "4613946" \| "4615001" \| | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |

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| L205 | 122 | L204 (parent or root or (top adj level) or (top adj most) or father or mother) near3 node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L206 | 38 | L204 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
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"6381742" | "6381743" |
"6385602" | "6389434" |
"6393456" | "6396488" |
"6408311" | "6421070" |
"6421656" | "6425125" |
"6426761" | "6434563" |
"6434564" | "6442544" |
"6442755" | "6446110" |
"6448985" | "6448987" |
"6460033" | "6460058" |
"6473800").PN. OR
("6476833" | "6477544" |
"6486898" | "6493702" |
"6502103" | "6505230" |
"6505300" | "6507856" |
"6509898" | "6516322" |
"6519617" | "6546546" |
"6549219" | "6549221" |
"6560640" | "6563514" |
"6563521" | "6567108" |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | "6571253" \| "6578144" \| "6581061" \| "6583794" \| "6584548" \| "6585778" \| "6604099" \| "6606606" \| "6609200" \| "6611822" \| "6611840" \| "6613098" \| "6615276" \| "6631357" \| "6643684" \| "6668369" \| "6671680" \| "6678717" \| "6691230" \| "6697944" \| "6701434" \| "6711679" \| "6748385" \| "6751777" \| "6772139" \| "6774926" \| "RE38070").PN. OR ("4710763" \| "5291587" \| "5333254" \| "5590250" \| "5596703" \| "5610828" \| "5619632" \| "5732277" \| "5870559" \| "5877775" \| "5905498" \| "6144962" \| "6219053" \| "6237006" \| "6340977" \| "6356902" \| "6356910" \| "6359637" \| "6380954" \| "6430574" \| "6434556" \| "6462762" \| "6509898" \| "6558431" \| "6628304" \| "6738787" \| "6874143" \| "6883020" \| "6883143" \| "6883168" \| "6901555" \| "7000230" \| "7046248").URPN. | | | | | |
| L214 | 142 | L213 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L215 | 30 | L213 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) (intersect$3 or overlap $3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L216 | 14 | L213 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) ((intersect$3 or overlap$3 or collide or collision) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L217 | 372 | ("20030050915" \| "3816726" \| "4524421" \| "4528643" \| "4613946" \| "4698752" \| "4710763" \| "4719571" \| "4807158" \| "4833592" \| "4841292" \| "4868771" \| "4928247" \| "4994989" \| "5043920" \| "5072395" \| "5150457" \| "5164904" \| "5201047" \| "5226120" \| "5228119" \| "5247517" \| "5247666" \| "5251131" \| "5253333" \| "5276789" \| "5282262" \| "5295243" \| "5295244" \| "5297241" \| "5303388" \| "5307456" \| "5325445" \| "5333254" \| "5337404" \| "5339390" \| "5379422" \| "5386394" \| "5394522" \| "5412772" \| "5418946" \| "5420968" \| "5426780" \| "5428744" \| "5459829" \| "5463773" \| "5467444" \| "5479597" \| "5504863" \| "5515486" \| "5515488" \| "5519865" \| "5526478" \| "5528735" \| "5546529" \| "5553163" \| "5555354" \| "5557714" \| "5559942" \| "5572640" \| "5592599" \| "5604821" \| "5619632" \| "5623590" \| "5634087" \| "5644740" \| "5659731" \| "5671333" \| "5671381" \| "5675711" \| "5675785" \| "5675786" \| "5678015" \| "5680476" \| "5684967" \| "5694524" \| "5696964" \| "5706495" \| "5715432" \| "5724573" \| "5727199" \| "5732230" \| "5737487" \| "5748852" \| "5751965" \| "5761664" \| "5761667" \| "5774669" \| "5786820" \| "5787274" \| "5802383" \| "5821937" \| "5861891" \| "5870768" \| "5877775" \| "5958008" \| "5966128" \| "6055539" \| "6067093" \| "B14555775").PN. OR ("5450535" \| "5590250" \| "5877766" \| "6067093" \| "6111578" \| "6137493" \| "6137499" \| "6219053" \| "6259451" \| "6259458" \| "6922692").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |

| L218 | 8 | L217 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) ((intersect$3 or overlap$3 or collide or collision) with node) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
|---|---|---|---|---|---|---|
| L219 | 118 | L213 L217 | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L220 | 78 | (hierarchical display).ti. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L221 | 35 | (hierarchical near3 display) (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) ((intersect$3 or overlap$3 or collide or collision) with node) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L222 | 7 | (edit$3 with hierarchical near3 display) (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom$3)) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L223 | 9 | (edit$3 with hierarchical near3 display) (((parent or root) with node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom$3)) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L224 | 64 | (edit$3 with (hierarchical or tree) near3 display) (((parent or root) with node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L225 | 3 | (edit$3 with (hierarchical or tree) near3 display) (((parent or root) with node) with ((intersect$3 or overlap$3 or collide or collision) with node)) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |

| L226 | 238 | ((hierarchical or tree)) (((parent or root or top) with node) with ((drag$3 adj over) or drop)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|------|-----|------|------|-----|-----|------|
| L227 | 3 | ((hierarchical or tree)) (((parent or root or top) with node) near5 ((drag$3 adj over) or (drop adj over))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L228 | 176 | ((hierarchical or tree)) (((parent or root or top) with node) near5 ((drag$3 or drop$3))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L229 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L230 | 607 | detect$4 (collision with between with nodes) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L231 | 252 | detect$4 same (collision with between with nodes) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L232 | 2 | "7035898".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L233 | 3 | ((hierarchical or tree)) (((parent or root or top) with node) with (drag adj over)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L234 | 13743 | (hierarchic$5 tree) (editor or editing or modifying) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L235 | 66 | (hierarchic$5 tree) (re adj position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|---|---|---|---|---|---|---|
| L236 | 39 | (hierarchic$5 tree) (re adj position) node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L237 | 948 | 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L238 | 374 | 715/853.ccls. (updat$3 (parent or node or root)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L239 | 54 | 715/853.ccls. (updat$3 near3 (parent or node or root)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L240 | 15 | 715/853.ccls. (reorder) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L241 | 128 | 715/853.ccls. shift | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L242 | 4 | 715/853.ccls. (vertical adj tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L243 | 148 | 715/853.ccls. ((node or root or parent) with position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| | | | | | | |
|---|---|---|---|---|---|---|
| L244 | 105 | 715/853.ccls. ((node or root or parent) near3 position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L245 | 16 | 715/853.ccls. (adjust near3 position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L246 | 88 | 715/853.ccls. (node near3 position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L247 | 39 | 715/853.ccls. ((intersection OR overlap or collide or collision or intersection or junction or overlap or cover or overlie) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L248 | 36 | 715/853.ccls. ((intersection OR overlap or collide or collision or intersection or junction or overlap or covering or overlie) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L249 | 28 | 715/853.ccls. ((intersection OR overlap or collide or collision or intersection or junction or overlap or overlie) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L250 | 2 | "5911145".pn. automatic $5 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L251 | 51 | 715/853.ccls. (node near3 automatic$4) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L252 | 0 | 715/853.ccls. (node near3 automatic$4) with insert | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L253 | 2 | 715/853.ccls. (node near3 automatic$4) with drop | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|------|------|------|------|------|------|------|
| L254 | 5 | 715/853.ccls. (node with automatic$4 with drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L255 | 63 | (node with automatic$4 with ((intersection or overlap or collide or collision or intersection))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L256 | 1480 | drop adj node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L257 | 85 | (drop adj node) editor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L258 | 127 | (Tree adj View adj Control) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L259 | 402 | (shift with (parent or root or node) with right) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L260 | 141 | (shift with (parent or root or node) with right) tree | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L261 | 14 | 715/853.ccls. Collision | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L262 | 1 | 715/853.ccls. (Collision with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
|------|-----|------|------|------|------|------|
| L263 | 39 | 715/853.ccls. ((Collision or overlap$3 or intersec$4) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L264 | 39 | 715/853.ccls. ((Collision or overlap$3 or intersec$4) with object) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L265 | 17 | 715/853.ccls. (adjusting with position ) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L266 | 252 | 715/853.ccls. layout | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L267 | 172 | L266 automatic$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L268 | 8 | 715/853.ccls. (layout with automatic) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L269 | 20 | 715/853.ccls. (layout with automatic$4) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L270 | 165 | (vertical adj tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L271 | 35 | (vertical adj tree)<br>(horizontal adj tree) | US-PGPUB;<br>USPAT; USOCR;<br>FPRS; EPO;<br>JPO;<br>DERWENT;<br>IBM_TDB | AND | ON | 2008/05/12<br>06:26 |
|------|----|---------------------------------------------|--------------------------------------------------------------------|-----|-----|-----------------------|
| L272 | 59 | ("4606002" \| "4611272" \|<br>"4945475" \| "5058144" \|<br>"5202986" \| "5230047" \|<br>"5257365" \| "5293616" \|<br>"5295261" \| "5333317" \|<br>"5377281" \| "5392363" \|<br>"5404510" \| "5418947" \|<br>"5487166" \| "5488717" \|<br>"5495609" \| "5497485" \|<br>"5528701" \| "5530957" \|<br>"5534861" \| "5551027" \|<br>"5557786" \| "5560007" \|<br>"5644763" \| "5649023" \|<br>"5651099" \| "5664172" \|<br>"5694591" \| "5701467" \|<br>"5717921" \| "5737732" \|<br>"5752243" \| "5761652" \|<br>"5765168" \| "5768423" \|<br>"5781772" \| "5787430" \|<br>"5799184" \| "5799299" \|<br>"5809296" \| "5832182" \|<br>"5842196" \| "5848416" \|<br>"5873087" \| "5884297" \|<br>"5963956" \| "5970170" \|<br>"6014659" \| "6041053" \|<br>"6153591" \| "6175835" \|<br>"6208993" \| "6240418").<br>PN. OR ("6675173").URPN. | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L273 | 107 | (visual adj tree) | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L274 | 473 | (dynamic near3 (tree or<br>hierarchy)) visual | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L275 | 260 | (dynamic near3 (tree or<br>hierarchy)) editor | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L276 | 546 | (dynamic near3 (tree or<br>hierarchy)) edit$3 | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L277 | 9 | (dynamic near3 (tree or<br>hierarchy)) with edit$3 | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L278 | 39 | (tree or hierarchy)<br>(relocate near3 node) | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |
| L279 | 52 | (tree near3 structure near3<br>editor) | US-PGPUB;<br>USPAT; USOCR | AND | ON | 2008/05/12<br>06:26 |

| L280 | 40 | ("4075689" \| "4318184" \| "4447875" \| "4468728" \| "4611298" \| "4613946" \| "4656603" \| "4677550" \| "4710763" \| "4763277" \| "4764867" \| "4813010" \| "4817036" \| "4831525" \| "4860204" \| "4866635" \| "4868743").PN. OR ("5493678").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
|------|----|------|------|------|------|------|
| L281 | 173 | (become near3 new near3 parent) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L282 | 105 | (become near3 new near3 parent) (tree or hierarchy) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L283 | 114 | (become near3 new near3 parent) (tree or hierarch $4) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L284 | 192 | (become near3 new near2 (parent or root)) (tree or hierarch$4) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L285 | 247 | ((tree adj structure) near3 edit$3) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L286 | 197 | (tree adj structure) near3 (editor or editing) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L287 | 59 | (tree adj structure) near3 (editor or editing) (drag$3 with drop$3) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L288 | 9 | (NetObjects).as. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L289 | 17 | (Arora Samir).inv. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L290 | 4 | ("5911145" \| "6237006" \| "6282454" \| "6421571").PN. | USPAT | AND | ON | 2008/05/12 06:26 |

| L291 | 21 | (US-20020120921-$ or US-20030191608-$).did. or (US-4914568-$ or US-5432897-$ or US-5606654-$ or US-5870559-$ or US-5911145-$ or US-6054986-$ or US-6067477-$ or US-6144962-$ or US-6259458-$ or US-6549221-$ or US-6618856-$ or US-6684264-$ or US-6754885-$ or US-6889096-$ or US-6975914-$ or US-7017116-$ or US-5386459-$ or US-6862105-$ or US-6067093-$ or US-5493678-$ or US-5812135-$).did. or (JP-05307476-$).did. | US-PGPUB; USPAT; JPO | AND | ON | 2008/05/12 06:26 |
| L292 | 148 | L243 position | US-PGPUB; USPAT; JPO | AND | ON | 2008/05/12 06:26 |
| L293 | 18 | L291 position | US-PGPUB; USPAT; JPO | AND | ON | 2008/05/12 06:26 |
| L294 | 7 | L291 (position near3 node) | US-PGPUB; USPAT; JPO | AND | ON | 2008/05/12 06:26 |
| L295 | 2 | L291 (relocat$3 near3 node) | US-PGPUB; USPAT; JPO | AND | ON | 2008/05/12 06:26 |
| L296 | 20 | ("4524421" \| "4613946" \| "4710763" \| "4841292" \| "5333254" \| "5557714" \| "5592599" \| "5619632" \| "5774669" \| "5786820" \| "5877775").PN. OR ("6259458").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L297 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L298 | 2 | hierarchi$5 node tree HMI (drag near3 drop) (parent with (updat$3 or refresh or recreate or restore or regenerate or correct)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L299 | 99 | (Industrial plant).ti. | USPAT | AND | ON | 2008/05/12 06:26 |
| L300 | 569 | (Industrial plant).ab. | USPAT | AND | ON | 2008/05/12 06:26 |
| L301 | 562 | (Industrial plant).clm. | USPAT | AND | ON | 2008/05/12 06:26 |
| L302 | 159 | (Industrial adj plant).clm. | USPAT | AND | ON | 2008/05/12 06:26 |

| L303 | 246 | (Industrial adj plant).clm. | US-PGPUB, USPAT | AND | ON | 2008/05/12 06:26 |
|---|---|---|---|---|---|---|
| L304 | 51 | (Industrial adj plant).ti. | US-PGPUB, USPAT | AND | ON | 2008/05/12 06:26 |
| L305 | 9 | (Industrial adj plant).ti. vertical horizontal | US-PGPUB, USPAT | AND | ON | 2008/05/12 06:26 |
| L306 | 30 | (Industrial plant).ti. vertical horizontal | US-PGPUB, USPAT | AND | ON | 2008/05/12 06:26 |
| L307 | 5 | (Industrial plant).ti. vertical horizontal GUI | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L308 | 5 | L307 position | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L309 | 5 | L307 parent position | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L310 | 5 | L307 (parent same position) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L311 | 5 | L307 (parent with position) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L312 | 0 | L307 (parent with adjusting) recursivlyu | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L313 | 6 | HMI adj user adj screens | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L314 | 80 | HMI adj screens | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L315 | 36 | (HMI adj screens) parent | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L316 | 3 | (HMI adj screens) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L317 | 0 | (process wtih visualization) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L318 | 198 | (process wit\h visualization) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L319 | 198 | (process with visualization) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L320 | 115 | (process with visualization) (drag with drop) hierarchy | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L321 | 3 | (process with visualization) (Supervisory adj Control adj system) (drag with drop) hierarchy | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L322 | 1 | 2004-315841.NRAN. | DERWENT | AND | ON | 2008/05/12 06:26 |
| L323 | 1 | 2004-315841.NRAN. | DERWENT | AND | ON | 2008/05/12 06:26 |
| L324 | 61279 | process visualization | US-PGPUB, USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |

| L325 | 65 | (process with visualization) (drag with drop) editor | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
|------|------|------|------|------|------|------|
| L326 | 1279 | hmi process | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L327 | 215 | (industrial process).ti. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L328 | 2118 | (industrial process).clm. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L329 | 518 | (industrial near process).clm. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L330 | 478 | (industrial adj process).clm. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L331 | 22 | (industrial adj process).clm. GUI | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L332 | 0 | (industrial adj process).clm. GUI editor.ti. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L333 | 5 | (process editor).ti. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L334 | 12 | (hmi with editor) "715".clas. | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L335 | 29 | (hmi with editor) | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L336 | 23 | (hmi with editor) position | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L337 | 34 | ((hmi or (human adj machine adj interface)) with edit$3) position | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L338 | 5 | ((hmi or (human adj machine adj interface)) with edit$3) position (dragged with top) | US-PGPUB | AND | ON | 2008/05/12 06:26 |
| L339 | 205 | 715/967.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L340 | 47 | 715/967.ccls. industrial | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L341 | 25 | 715/967.ccls. industrial (drag or drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:26 |
| L342 | 25 | 715/967.ccls. industrial (drag or drop) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |

| L343 | 65 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
|------|----|----|----|----|----|----|
| L344 | 15 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) parent node | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L345 | 6 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) parent same node | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L346 | 6 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) (parent same node) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L347 | 1 | "5905989".pn. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L348 | 80 | ("4591983" \| "4628435" \| "4644479" \| "4719586" \| "4803039" \| "4815014" \| "4839823" \| "4853175" \| "4855923" \| "4858102" \| "4947095" \| "5068080" \| "5099436" \| "5119318" \| "5148363" \| "5161110" \| "5189604" \| "5195029" \| "5214577" \| "5216612" \| "5239547" \| "5249260" \| "5251144" \| "5267141" \| "5305426" \| "5333240" \| "5355444" \| "5398304" \| "5402526" \| "5403447" \| "5406502" \| "5412756" \| "5414632" \| "5442562" \| "5463545" \| "5463567" \| "5511004" \| "5521844" \| "5541832" \| "5557549" \| "5559691" \| "5561610" \| "5617514" \| "5630025" \| "5659743").PN. OR ("5905989").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:26 |
| L349 | 23 | ((715/967.ccls.) OR (715/771.ccls.)) (parent with node) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L350 | 12 | ((715/967.ccls.) OR (715/771.ccls.)) (parent with node) hierarchy | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L351 | 10 | ((715/967.ccls.) OR (715/771.ccls.)) (parent with position) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L352 | 8 | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |

| L353 | 8 | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) parent node | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
|------|------|------|------|------|------|------|
| L354 | 2 | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) parent node recursively | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L355 | 2 | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) recursively | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L356 | 153 | industrial (parent adj node) recursively | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L357 | 138 | industrial (parent adj node) recursively (not (INDUSTRIAL adj APPLICABILITY)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L358 | 9 | industrial plant (parent adj node) recursively | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:26 |
| L359 | 1 | ((10/196007).APP. | USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L360 | 2 | (industrial with plant) (automated with controller) (recursively with update) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L361 | 2 | "20040128120".pn. or "20040073404".pn. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L362 | 300 | (node with collision) industrial | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L363 | 43 | (node with collision) industrial plant | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L364 | 15 | (node with overlap) industrial plant | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L365 | 8 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drop with top) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L366 | 2 | ((715/967.ccls.)) (drop with top) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L367 | 54 | (drop same (updat$3 with hierarchy)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L368 | 11 | (automated adj machine adj controller) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L369 | 1383 | (automated )(machine adj controller) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L370 | 317 | (automated )(machine adj controller) cell control | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L371 | 317 | (automated )(machine adj controller) (cell control) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L372 | 3 | (automated )(machine adj controller) (cell adj control) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |

| L373 | 3 | (715/967.ccls.) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
|------|---|---|---|---|---|---|
| L374 | 1 | (industrial near3 plant) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L375 | 18 | ((manufactur$3 or industrial or automation) near3 plant) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L376 | 28 | ((manufactur$3 or industrial or automation or process$3) near3 plant) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L377 | 33 | (vertical adj tree) (horizontal adj tree) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L378 | 2293 | (vertical$5 with tree) (horizontal$5 with tree) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L379 | 112 | (vertical$5 with tree) (horizontal$5 with tree) (drag$4 drop$4) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L380 | 7 | (vertical$5 with tree) (horizontal$5 with tree) (drag$4 drop$4) ((manufactur$3 or industrial or automation or process$3) near3 plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L381 | 11 | industrial plant (drag adj drop) recursively | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L382 | 20 | "6282455" | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L383 | 2 | industrial plant (drag adj drop) (recursively with updat$3) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L384 | 40 | industrial plant (drag drop) (recursive$3) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L385 | 16 | industrial plant (drag drop) (recursive$3) tree | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L386 | 2 | industrial ((drag drop) same (recursive$3)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L387 | 25 | industrial ((drag or drop) same (recursive$3)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L388 | 1 | "7165226".pn. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L389 | 3 | "6,889,096" | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L390 | 20 | ("20050004781" \| "5072412" \| "5247433" \| "6189019" \| "6587108" \| "6795798" \| "6888554" \| "6889096" \| "6947798" \| "6966033").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L391 | 10 | ("20050004781" \| "5072412" \| "5247433" \| "6189019" \| "6587108" \| "6795798" \| "6888554" \| "6889096" \| "6947798" \| "6966033").PN. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
|------|-----|------|------|------|------|------|
| L392 | 1 | "6477435".pn. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L393 | 11 | ("5812394" \| "5822206" \| "6161051").PN. OR ("6477435").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L394 | 1 | "20060256084".pn. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L395 | 3 | ("5546521" \| "5777616" \| "6347800").PN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L396 | 3 | ("6055369" \| "20010029506" \| "5926180").pn. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L397 | 2 | "6421571".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L398 | 69 | ("4399513" \| "4413314" \| "4644479" \| "4803039" \| "4872121" \| "4985857" \| "5202828" \| "5291416" \| "5311562" \| "5559691" \| "5602757" \| "5623109" \| "5631825" \| "5675752" \| "5719796" \| "5748881" \| "5822743" \| "5826251" \| "5838588" \| "5854994" \| "5859885" \| "5870698" \| "5877961" \| "5899990" \| "5905985" \| "5905989" \| "5918225" \| "5963884" \| "5995916" \| "RE31750").PN. OR ("6421571").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L399 | 4 | L398 drag drop | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L400 | 144 | (Industrial plant).ti. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L401 | 34 | (Industrial plant).ti. | US-PGPUB | AND | ON | 2008/05/12 06:27 |
| L402 | 68 | "5911145" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L403 | 4 | "5911145" industrial | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|------|---|----------------------|----------------------------------------------------------|-----|----|------------------|
| L404 | 61 | "5911145" process | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L405 | 48 | "5911145" process control | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L406 | 17 | "5911145" process with control | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L407 | 7 | (vertical$5 with tree) (horizontal$5 with tree) (drag$4 drop$4) ((manufactur$3 or industrial or automation or process$3 or scada) near3 plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L408 | 2 | "6282454".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L409 | 1 | "6282454".pn. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L410 | 22 | (US-20030028269-$ or US-20030101021-$ or US-20030191608-$ or US-20030023518-$).did. or (US-6054986-$ or US-4914568-$ or US-6975914-$ or US-6854111-$ or US-6067477-$ or US-6754885-$ or US-6618856-$ or US-7017116-$ or US-6259458-$ or US-6067093-$ or US-5606654-$ or US-5432897-$ or US-6144962-$ or US-5870559-$ or US-5493678-$ or US-6549221-$ or US-6684264-$ or US-5812135- | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |

| | | $).did. | | | | |
|---|---|---|---|---|---|---|
| L411 | 1 | L410 drag with top | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L412 | 25 | ("4812996" \| "4868785" \| "4884228" \| "5136705" \| "5155836" \| "5481741" \| "5630164" \| "5812394" \| "5966532" \| "5991537" \| "5309352" \| "5801942" \| "5828851" \| "5838563" \| "5970471" \| "6053951" \| "6061057" \| "6064816" \| "6098028" \| "6173438" \| "6219628" \| "6785805" \| "6083267" \| "6167383" \| "6339763").PN. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L413 | 15 | L412 (drop or drag) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L414 | 1 | industrial (recursively with update with (hierarchy or tree)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L415 | 1 | industrial (recursively same update with (hierarchy or tree)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L416 | 1 | industrial (recursively same (update with (hierarchy or tree))) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L417 | 34 | (recursively same (update with (hierarchy or tree))) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L418 | 6 | (update with (hierarchy or tree)) (industrial plant).ab. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L419 | 2 | (recursively with updat$3) hierarchy (drag$3 or drop $3) (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L420 | 2 | (recursively with updat$3) hierarchy (drag$3 or drop $3 or "on top of") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L421 | 2 | (recursively with updat$3) hierarchy (drag$3 or drop $3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L422 | 75 | (updat$3) hierarchy (drag $3 or drop$3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L423 | 0 | ((updat$3) with hierarchy) (drag$3 or drop$3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L424 | 8 | ((updat$3) with (hierarchy or tree or link)) (drag$3 or drop$3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |

| L425 | 3008 | (industrial adj plant).ab. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|------|------|----------------------------|----------------|-----|-----|------------|
| L426 | 257 | (industrial adj plant).ab. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L427 | 561 | (715/965.ccls. or 715/966. ccls. or 715/967.ccls. or 715/969.ccls. or 715/970. ccls.) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L428 | 108 | L427 industrial | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L429 | 37 | L428 Hierarchic$4 | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L430 | 22 | L429 (drag$3 or drop$3) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L431 | 43 | L428 Hierarch$6 | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L432 | 70 | "715".clas. (parent with overlap) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L433 | 13 | (automated adj machine adj controller) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L434 | 148 | (automated with ( machine adj controller)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L435 | 2 | (industrial adj plant) (automated with ( machine adj controller)) (hmi or mmi) Hierarchic$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L436 | 4 | (industrial adj plant) iconic $4 Hierarchic$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L437 | 15259 | ((human adj machine adj interface) or (HMI) or (man adj machine adj interface)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|---|---|---|---|---|---|---|
| L438 | 10755 | ((human adj machine adj interface) or (HMI) or (man adj machine adj interface)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L439 | 4645 | L438 calcula$4 | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L440 | 24 | ("5812135").URPN. | USPAT | AND | ON | 2008/05/12 06:27 |
| L441 | 24 | (US-20030023518-$ or US-20030028269-$ or US-20030101021-$ or US-20030191608-$).did. or (US-6854111-$ or US-5432897-$ or US-7017116-$ or US-6053951-$ or US-6975914-$ or US-5870559-$ or US-6054986-$ or US-6144962-$ or US-6684264-$ or US-6549221-$ or US-5812135-$ or US-4914568-$ or US-5606654-$ or US-5838563-$ or US-6618856-$ or US-6754885-$ or US-6067093-$ or US-5493678-$ or US-6067477-$ or US-6259458-$).did. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L442 | 11 | L441 industrial | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L443 | 2 | "US 20030036873" | US-PGPUB; USPAT; USOCR; DERWENT | AND | ON | 2008/05/12 06:27 |
| L444 | 1 | "20030036873".pn. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L445 | 1 | 2003-456454.NRAN. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L446 | 3 | ( ONLINE CONFIGURATION MEASUREMENT SYSTEM).ti. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L447 | 1 | 2003-466375.NRAN. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L448 | 1 | 2003-466375.NRAN. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L449 | 6 | ( ONLINE MEASUREMENT SYSTEM).ti. | US-PGPUB | AND | ON | 2008/05/12 06:27 |
| L450 | 10 | ("2003/0036871").URPN. | USPAT | AND | ON | 2008/05/12 06:27 |

| L451 | 47 | ("20020144282" \| "20030036871" \| "20030036874" \| "20030036875" \| "20030036876" \| "20030058280" \| "20030066065" \| "20030163298" \| "4812996" \| "4868785" \| "4884228" \| "5136705" \| "5155836" \| "5481741" \| "5630164" \| "5752042" \| "5812394" \| "5845077" \| "5966532" \| "5970471" \| "5974454" \| "5991537" \| "6049789" \| "6053951" \| "6064816" \| "6074434" \| "6083267" \| "6098028" \| "6105063" \| "6167383" \| "6173438" \| "6219628" \| "6266774" \| "6269456" \| "6339763" \| "6367077" \| "6493871" \| "6535911" \| "6681351" \| "6701513" \| "6732296" \| "6751794" \| "6785805").PN. OR ("6889172").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L452 | 24 | L451 (drop$3 or drag$3) position | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L453 | 12 | L451 (drop$3 or drag$3) position | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L454 | 44 | "715".clas. (industrial with process)(drop$3 or drag $3) position parent | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L455 | 12 | "715".clas. (industrial with process)(drop$3 or drag $3) position parent ((virtual adj instrument) or (virtual adj panel)) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L456 | 14 | "715".clas. (industrial with process)(drop$3 or drag $3) position parent ((virtual adj instrument) or (virtual adj panel) or (screen adj node)) | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |

| L457 | 27 | ("4812996" \| "4868785" \| "4884226" \| "5136705" \| "5155836" \| "5309352" \| "5481741" \| "5630164" \| "5801942" \| "5812394" \| "5828851" \| "5838563" \| "5966532" \| "5970471" \| "5991537" \| "5861882" \| "6053951" \| "6061057" \| "6064816" \| "6083267" \| "6098028" \| "6167383" \| "6173438" \| "6219628" \| "6339763" \| "6078320" \| "6985876").PN. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
|------|------|------|------|------|------|------|
| L458 | 31944 | ((Configur\$3 or edit\$3) (Process adj Control)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L459 | 12 | ((Configur\$3 or edit\$3) (Process adj Control)).ti. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L460 | 82 | ("3665172" \| "4006464" \| "4302820" \| "4413314" \| "4443861" \| "4639852" \| "4641269" \| "4663704" \| "4672530" \| "4682158" \| "4704676" \| "5121318" \| "5124908" \| "5129087" \| "5140677" \| "5164894" \| "5168441" \| "5202961" \| "5251125" \| "5307346" \| "5309556" \| "5371895" \| "5377315" \| "5384910" \| "5392389" \| "5394522" \| "5408603" \| "5420977" \| "5426732" \| "5428734" \| "5432711" \| "5437007" \| "5444851" \| "5452201" \| "5459825" \| "5461710" \| "5467264" \| "5475856" \| "5481741" \| "5485620" \| "5491791" \| "5500934" \| "5504672" \| "5504902" \| "5513095" \| "5519605" \| "5530643" \| "5546301" \| "5549137" \| "5550980" \| "5559691" \| "5566320" \| "5576946" \| "5594858" \| "5621871" \| "Re33162").PN. OR ("5940294").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L461 | 2 | L460 L459 | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L462 | 92 | L460 or L459 | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L463 | 12 | ((Configur\$3 or edit\$3) ((industrial adj plant) or (Process adj Control))).ti. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |

| L464 | 92 | L463 or L462 | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
|------|-----|--------------|-----------------|-----|-----|------------------|
| L465 | 28 | L464 collection | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L466 | 38 | L464 node | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L467 | 14 | L464 node parent | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L468 | 9 | L467 drag$3 | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L469 | 5 | L468 overlap | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L470 | 16 | ("20030232176" \| "4290248" \| "4721589" \| "5007818" \| "5149193" \| "5362222" \| "5812394" \| "6156842").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L471 | 3 | ("6904387").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L472 | 2 | "20040024657".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L473 | 2 | "6853920".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L474 | 198341 | Siemens.as. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L475 | 123 | Siemens.as. HMI | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L476 | 9 | Siemens.as. HMI parent | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L477 | 1068 | ((man or human) adj machine adj interface).clm. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|---|---|---|---|---|---|---|
| L478 | 246 | ((man or human) adj machine adj interface).clm. industrial | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L479 | 110 | ((man or human) adj machine adj interface).clm. industrial graphical | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L480 | 40 | ((man or human) adj machine adj interface).clm. industrial graphical hierarchy | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L481 | 1 | ((man or human) adj machine adj interface).clm. industrial graphical hierarchy (equal$4 adj spac $3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L482 | 23 | ((man or human) adj machine adj interface).clm. industrial graphical hierarchy parent | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L483 | 13 | ((man or human) adj machine adj interface) industrial graphical hierarchy parent hmi scada visualization | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L484 | 1561 | (Rockwell Automation).as. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L485 | 8 | hmi objects | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L486 | 3 | (intelligent adj hmi) objects | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L487 | 103 | ((man or human) adj machine adj interface) industrial graphical hierarch $5 parent hmi | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |

| L488 | 83 | yufeng.inv. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
|------|-----|------------|-----------------|-----|-----|-----------------|
| L489 | 35 | (vertical adj tree) (horizontal adj tree) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L490 | 948 | 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L491 | 203 | 715/853.ccls. vertical horizontal | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L492 | 2 | (715/855.ccls. or 715/854. ccls. or 715/853.ccls.) vertical horizontal vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L493 | 85 | 715/858.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L494 | 777 | 715/854.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L495 | 2 | 715/854.ccls. vertical horizontal vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L496 | 0 | 715/854.ccls. (vertical$4 near2 (hierarchy or tree)) (horizontal$4 near2 (hierarchy or tree)) vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L497 | 0 | (vertical$4 near2 (hierarchy or tree)) (horizontal$4 near2 (hierarchy or tree)) vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|------|---|---|---|---|---|---|
| L498 | 560 | (vertical$4 near2 (hierarchy or tree)) (horizontal$4 near2 (hierarchy or tree)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L499 | 39 | L498 "715".clas. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L500 | 3 | (vertical$4 with (hierarchy or tree)) (horizontal$4 with (hierarchy or tree)) VRML | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L501 | 3 | (vertical$4 with (hierarchy or tree or (layout tree))) (horizontal$4 with (hierarchy or tree or (layout tree))) VRML | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L502 | 193 | tree.ti. "715".clas. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L503 | 48 | tree.ti. "715".clas. horizontal | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L504 | 0 | (vrml with hierarch$5) HMI | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L505 | 64 | (vrml with hierarch$5) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L506 | 0 | (vrml with (hierarch$5 OR tree)) HMI | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|---|---|---|---|---|---|---|
| L507 | 110 | (vrml with (hierarch$5 OR tree)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L508 | 8071 | (types! with tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L509 | 517 | (types! with tree) "715". clas. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L510 | 16 | (types! with tree) "715". clas. vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L511 | 19 | vrml.ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L512 | 11029 | (vertical$4 horizont$5) same (tree or hierarch$6) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L513 | 22 | ((vertical$4 horizont$5) same (tree or hierarch$6)) vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
| L514 | 13 | ((vertical$4 horizont$5) vrml (spaced with equal $5)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |

| L515 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:27 |
|------|-----|---------------|------|------|------|-----------|
| L516 | 69 | ("5446837" \| "5632022" \| "5634062" \| "5634095" \| "5644736" \| "5644740" \| "5701137" \| "5745360" \| "5748186").PN. OR ("5911145").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L517 | 6746 | 345/419.ccls. 345/420.ccls. 345/421.ccls. 345/422.ccls. 345/423.ccls. 345/424.ccls. 345/425.ccls. 345/426.ccls. 345/427.ccls. | US-PGPUB; USPAT; USOCR | OR | ON | 2008/05/12 06:27 |
| L518 | 1 | 1998-130869.NRAN. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L519 | 15 | ("5302103" \| "5736080" \| "5852722" \| "6137408" \| "6275741" \| "6393807" \| "6466154").PN. OR ("6684264").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2008/05/12 06:27 |
| L520 | 542 | arora.inv. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L521 | 0 | (arora samir).inv. | DERWENT | AND | ON | 2008/05/12 06:27 |
| L522 | 17 | (arora samir).inv. | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:27 |
| L523 | 74 | horizontal vertical hierarchy arrangement VRML | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L524 | 0 | (horizontal adj (tree or layout or arrangement or configuration or hierarchy)) (vertical adj (tree or layout or arrangement or configuration or hierarchy)) VRML | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L525 | 2123 | (horizontal adj (tree or layout or arrangement or configuration or hierarchy)) (vertical adj (tree or layout or arrangement or configuration or hierarchy)) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L526 | 3 | L525 HMI | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L527 | 40 | L525 industrial plant | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |

| L528 | 3097 | (horizontal same vertical same tree) | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
|------|------|-------------------------------------|------------------|-----|-----|-------------------|
| L529 | 208 | (horizontal same vertical same tree) industrial | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L530 | 75 | (horizontal same vertical same tree) industrial rotate | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L531 | 55 | (horizontal same vertical same tree) industrial rotate aligned | US-PGPUB; USPAT | AND | ON | 2008/05/12 06:28 |
| L532 | 2 | "5420977".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |
| L533 | 45 | hmi same html | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |
| L534 | 0 | hmi same vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |
| L535 | 3 | "6615091".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |
| L536 | 96 | (HMI with development ) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |
| L537 | 39 | L536 html | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |
| L538 | 2 | "6282455".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2008/05/12 06:28 |

| S214 | 2446 | (human-machine adj interface) or (human adj machine adj interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/20 16:12 |
|------|------|------|------|------|------|------|
| S215 | 351 | S214 navigation | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 10:46 |
| S216 | 120 | S215 and node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 13:30 |
| S217 | 293 | 700/20.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 15:33 |
| S218 | 1419 | 700/83.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 13:45 |
| S219 | 369 | 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 15:36 |
| S220 | 625 | 715/854.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 15:37 |
| S221 | 979 | 715/854.ccls. or 715/514. ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 15:37 |
| S222 | 2643 | 715/854.ccls. or 715/514. ccls. or 700/83.ccls. or 700/20.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 15:37 |
| S223 | 67 | S222 and (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 15:40 |

| S225 | 3751 | (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 12:17 |
| S228 | 14 | HMI adj editor | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 16:42 |
| S229 | 90 | (HMI adj editor) or (Human Machine Interface adj editor) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 10:28 |
| S230 | 14 | (HMI adj editor) or (Human adj Machine adj Interface adj editor) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 16:44 |
| S232 | 49 | ((HMI adj editor) or ((Human adj Machine adj Interface) adj editor) or (man adj machine adj interface)) and (user adj screen) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 17:20 |
| S234 | 5 | 09/607369 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/01 17:22 |
| S235 | 12 | ((HMI adj editor) or ((Human adj Machine adj Interface) adj editor)) and hierarch$7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 11:29 |
| S237 | 12 | ((HMI adj editor) or ((Human adj Machine adj Interface) adj editor)) and hierarch$7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 11:45 |
| S238 | 10 | S237 and zoom$6 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 11:30 |
| S239 | 59 | ((HMI) or (Human adj Machine adj Interface)) and hierarch$7 and zoom $5 and (render or supply or provide or furnish or yield or return or give, or deliver or depict or show or display) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 12:16 |

| S240 | 249 | (HMI or (Human adj Machine adj Interface)).ti. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:08 |
| S242 | 12 | (HMI or (Human adj Machine adj Interface)).ti. and hierarc$10 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:33 |
| S243 | 35 | (HMI or (Human adj Machine adj Interface)).ab. and hierarc$10 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 14:25 |
| S244 | 12 | S243 and leaf and node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 13:07 |
| S245 | 3 | S243 and leaf and node zoom | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 09:57 |
| S246 | 291 | (715/771).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:40 |
| S247 | 20 | (715/771).ccls. and (715/763).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 13:57 |
| S248 | 14 | (715/771).ccls. and (715/762).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:03 |
| S249 | 3 | (715/771).ccls. and (715/762).ccls. and hierarch$9 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 13:58 |
| S250 | 6 | ("5301301" \| "5592600" \| "6054986" \| "6437805" \| "6449624" \| "6593947").PN. | US-PGPUB; USPAT; USOCR | AND | ON | 2006/06/05 14:21 |
| S251 | 362 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and specification | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 14:48 |

| S253 | 362 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and (specification) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 13:34 |
|------|-----|------|------|------|------|------|
| S254 | 33 | ("5042002" "5093794" "5377309" "5398336" "5412756" "5548756" "5787438" "5815539" "5911143" "5920711" "5943675" "6028819" "6081750" "6108662" "6157864" "6161051" "6167406").pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/06/05 14:35 |
| S255 | 17 | ("5042002" "5093794" "5377309" "5398336" "5412756" "5548756" "5787438" "5815539" "5911143" "5920711" "5943675" "6028819" "6081750" "6108662" "6157864" "6161051" "6167406").pn. | US-PGPUB; USPAT | OR | ON | 2006/06/05 14:38 |
| S256 | 4 | S255 and zoom | US-PGPUB; USPAT | OR | ON | 2006/06/05 14:41 |
| S257 | 22 | providing screen navigation editor linked hierarch$9 HMI screen node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 14:48 |
| S258 | 33 | providing screen navigation editor hierarch $9 (HMI or (Human adj Machine adj Interface)) screen node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 14:49 |
| S261 | 475 | (715/762).ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:03 |
| S267 | 3 | editor hierarch$9 (root adj node) (specification or Specify) with (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:35 |
| S268 | 4 | editor hierarch$9 (root adj node) (specification or Specify) SAME (HMI or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:36 |

| S270 | 82 | (715/771).ccls. and node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:40 |
|------|-----|--------------------------|---------------------------------------------------|-----|-----|-------------------|
| S271 | 18 | S270 and root | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:38 |
| S272 | 11 | S271 and specification | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 15:39 |
| S273 | 87 | (715/771).ccls. and hierarch$9 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:01 |
| S274 | 21 | (715/771).ccls. and hierarch$9 root | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:01 |
| S277 | 276 | hierarch$9 (root adj node) editor navigation | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:28 |
| S278 | 270 | S277 and interface | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:28 |
| S279 | 70 | S278 industrial | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:29 |
| S281 | 4492 | hierarch$9 (root adj node) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:37 |
| S282 | 2593 | S281 and specification | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 17:20 |

| S283 | 1960 | S282 relationship | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:41 |
|------|------|-------------------|------|-----|-----|------|
| S284 | 990 | S283 arrangement | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:51 |
| S285 | 18 | S281 and 715/762.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 17:03 |
| S286 | 3 | S284 and 715/762.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 16:53 |
| S289 | 18 | Specify adj root adj node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/05 17:22 |
| S291 | 10 | zoom and HMI adj editor | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 14:28 |
| S292 | 117 | zoom and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:26 |
| S293 | 17 | second adj screen and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:27 |
| S294 | 17 | (second adj screen) and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:49 |
| S295 | 714 | 700/17.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:36 |

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|---|---|---|---|---|---|---|
| S297 | 921 | 700/204.ccls. or 700/15-17. ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:36 |
| S298 | 856 | button and (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:50 |
| S301 | 4 | first adj (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:53 |
| S302 | 2456 | (Human adj Machine adj Interface) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 16:01 |
| S304 | 561 | S302 node | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:54 |
| S305 | 439 | S302 node link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:54 |
| S306 | 140 | S302 node same link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:56 |
| S307 | 66 | S306 and hierarch$7 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 15:56 |
| S309 | 213 | (Human adj Machine adj Interface) and editor | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 15:28 |
| S311 | 95 | (Human adj Machine adj Interface) and navigating | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 17:37 |

| S312 | 354 | (Human adj Machine adj Interface) and navigation | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 17:37 |
|------|-----|--------------------------------------------------|-----------------------------------------------------|-----|----|-------------------|
| S313 | 228 | S312 and links | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 17:37 |
| S314 | 58 | S312 and linking | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 17:40 |
| S315 | 34 | S314 and edit$3 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/07 17:40 |
| S317 | 30 | hierarch$9 (root adj node) (specification SAME (HMI or ((human-machine adj interface) or (human adj machine adj interface)))) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 12:19 |
| S318 | 305 | hierarch$9 specification and (HMI or (human-machine adj interface) or (human adj machine adj interface)) link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 12:22 |
| S319 | 40 | hierarch$9 specification and (HMI or (human-machine adj interface) or (human adj machine adj interface)) SAME link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 12:22 |
| S320 | 23 | hierarch$9 specification and (HMI or (human-machine adj interface) or (human adj machine adj interface)) WITH link | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/02 15:19 |
| S327 | 167 | creat$5 WITH (HMI or (human-machine adj interface) or (human adj machine adj interface)) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 14:26 |
| S328 | 59 | S327 and hierarc$10 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 14:22 |

| S329 | 56 | (HMI or (human-machine adj interface) or (human adj machine adj interface)) adj screen | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 15:05 |
|------|-----|------|------|-----|-----|------|
| S330 | 2 | "6618856".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 15:07 |
| S331 | 4 | 2002/0120921 | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 15:07 |
| S332 | 2 | "20020120921".did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 16:17 |
| S333 | 2 | "6421571".did. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/08 16:17 |
| S334 | 8 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and leaf parent collision | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 13:44 |
| S335 | 35 | (HMI or (Human adj Machine adj Interface)) and hierarc$10 and leaf obtaining | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 13:57 |
| S336 | 626 | 715/854.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 13:58 |
| S337 | 372 | 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 15:27 |
| S338 | 1423 | 700/83.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 13:58 |

| S339 | 67 | 715/726.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 15:27 |
|---|---|---|---|---|---|---|
| S340 | 1423 | 700/83.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 15:27 |
| S341 | 372 | 715/514.ccls. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/15 15:27 |
| S342 | 8 | "6055369".pn. "6407758".pn. "5812135".pn. "5911145".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | ON | 2006/06/22 15:00 |
| S348 | 2 | ("20020120921").PN. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | OR | OFF | 2006/06/22 14:27 |
| S350 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/06/22 10:54 |
| S351 | 15 | (US-20020120921-$).did. or (US-6975914-$ or US-6889096-$ or US-6754885-$ or US-6054986-$ or US-4914568-$ or US-5301301-$ or US-6618856-$ or US-5386459-$ or US-6862105-$ or US-5566333-$ or US-5911145-$ or US-7017116-$ or US-6549221-$ or US-6684264-$).did. | US-PGPUB; USPAT | AND | ON | 2006/12/19 10:27 |
| S352 | 93 | (HMI adj editor) or (Human Machine Interface adj editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 10:28 |
| S353 | 66 | (HMI with editor) or ((Human Machine Interface) with editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 10:29 |

| S354 | 43 | ("HMI" with editor) or ((Human adj Machine adj Interface) with editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 13:20 |
|------|-----|------|------|------|------|------|
| S355 | 79 | ("HMI" with edit$3) or ((Human adj Machine adj Interface) with edit$3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 13:37 |
| S357 | 3 | (("HMI" with edit$3) or ((Human adj Machine adj Interface) with edit$3)) collision | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 13:43 |
| S358 | 231 | (("HMI") or ((Human adj Machine adj Interface))) collision | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:48 |
| S359 | 2 | (("HMI") or ((Human adj Machine adj Interface))) (collision near3 node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 13:45 |
| S360 | 3 | (("HMI") or ((Human adj Machine adj Interface))) (collision with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 13:45 |
| S361 | 6 | (("HMI") or ((Human adj Machine adj Interface))) (node near (intersect$3 or overlap$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 15:43 |
| S362 | 6 | (("HMI") or ((Human adj Machine adj Interface))) (node near3 (intersect$3 or overlap$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 15:50 |
| S363 | 7 | (("HMI") or ((Human adj Machine adj Interface))) (node with (intersect$3 or overlap$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:00 |

| S364 | 2 | (("HMI") or (Human adj Machine adj Interface)) (leaf with parent) ((intersect$3 or overlap$3 or collide or collision) same (leaf or parent or node )) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:20 |
|------|---|---|---|---|---|---|
| S365 | 1499 | ((monitoring or program$4 or controll$3) with ((automation near2 machine) or (automation near2 process$3))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:10 |
| S366 | 130 | S365 (screens)! | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:27 |
| S367 | 40 | S366 tree | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:31 |
| S368 | 37 | S367 node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:29 |
| S369 | 27 | S368 parent | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:29 |
| S370 | 5 | S369 (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:32 |
| S371 | 5 | S366 tree (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:01 |
| S372 | 20 | S365 (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 16:32 |

| S373 | 203 | ("20040205726" | US-PGPUB; | OR | ON | 2006/12/19 |
|------|-----|---------------|-----------|----|----|-----------|
| | | "20040015928" | USPAT; USOCR; | | | 17:02 |
| | | "20040205536" | FPRS; EPO; | | | |
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| | | "20040053645"<br>"20040064556"<br>"20040064523").pn. | | | | |
| S374 | 102 | ("20040205726"<br>"20040015928"<br>"20040205536"<br>"20040205535"<br>"20040163046"<br>"20050243735"<br>"20050063337"<br>"20050116953"<br>"20050038533"<br>"20040006744"<br>"20040003348"<br>"20040006614"<br>"20040015486"<br>"20040024625"<br>"20060155654"<br>"20040032422"<br>"20040044636"<br>"20040044702"<br>"20040053645"<br>"20040064556"<br>"20040064523"<br>"20040064522"<br>"20040205594"<br>"20040068521"<br>"20040068491"<br>"20040073579"<br>"20040073659"<br>"20040078264"<br>"20050188108"<br>"20040085912"<br>"20040085347"<br>"20040085329"<br>"20040088294"<br>"20040085367"<br>"20040088678"<br>"20040088305"<br>"20040059522"<br>"20040059521"<br>"20040093560"<br>"20040098474"<br>"20060143202"<br>"20040012641"<br>"20040012640"<br>"20040111711"<br>"20040210464"<br>"20040117336"<br>"20040122789"<br>"20040003349"<br>"20040119753"<br>"20040119743"<br>"20040064802"<br>"20040139080"<br>"20040128070"<br>"20040125114"<br>"20040139155" | US-PGPUB | OR | ON | 2006/12/19<br>17:02 |

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| S376 | 13 | S374 overlap | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:03 |
| S377 | 21 | (intersect$3 or overlap$3 or collide or collision) S373 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:05 |
| S379 | 1 | (intersect$3 or overlap$3 or collide or collision) S373 (updat$3 with position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:06 |
| S380 | 34 | (intersect$3 or overlap$3 or collide or collision) S365 (updat$3 with position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:07 |
| S381 | 2 | S365 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:11 |
| S382 | 2 | (("HMI") or ((Human adj Machine adj Interface))) (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:07 |
| S383 | 7242 | ((monitoring or program$4 or controll$3) same ((automation with machine) or (automation with process$3))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:48 |
| S384 | 2 | S383 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:49 |

| S385 | 2 | ScreenNavNodes | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:25 |
|------|------|------|------|------|------|------|
| S386 | 11192 | (("HMI") or ((Human adj Machine adj Interface))) or S383 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:52 |
| S387 | 2 | S386 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:50 |
| S388 | 2 | S386 (intersect$3 or overlap$3 or collide or collision) ((updat$3 with position) same parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:50 |
| S389 | 30 | S386 ((intersect$3 or overlap$3 or collide or collision) same parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:53 |
| S390 | 93 | S386 ((intersect$3 or overlap$3 or collide or collision) same node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:51 |
| S391 | 19484 | (("HMI") or (Human adj Machine adj Interface) or (Supervisory adj Control)) or S383 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:53 |
| S392 | 38 | S391 ((intersect$3 or overlap$3 or collide or collision) same parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:54 |
| S393 | 92 | S391 ((intersect$3 or overlap$3 or collide or collision) with (parent or child or node)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:56 |

| S394 | 41 | S391 ((intersect$3 or overlap$3 or collide or collision) with (parent or child or node)) tree | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:56 |
|------|-----|------|------|-----|-----|------|
| S395 | 7 | S391 ((intersect$3 or overlap$3 or collide or collision) with (parent or child or node)) tree visibility | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 17:57 |
| S396 | 3 | tree (node with visibility) (("HMI") or (Human adj Machine adj Interface)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:25 |
| S397 | 105 | 715/965.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:24 |
| S398 | 183 | 715/967.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:26 |
| S399 | 69 | S398 node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:27 |
| S400 | 28 | S398 node parent | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:27 |
| S401 | 5 | S398 parent adj node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:29 |
| S402 | 2 | S398 (parent adj node) (intersect$3 or overlap$3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:40 |

| S403 | 3 | (715/964.ccls. or 715/965. ccls. 715/966.ccls. 715/967. ccls. 715/969.ccls. 715/970. ccls.) (parent adj node) (intersect$3 or overlap$3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:41 |
|---|---|---|---|---|---|---|
| S406 | 7 | (715/964.ccls. or 715/965. ccls. or 715/966.ccls. or 715/967.ccls. or 715/969. ccls. or 715/970.ccls.) AND ((intersect$3 or overlap$3 or collide or collision) with node) AND (intersect$3 or overlap$3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:49 |
| S410 | 10 | (updat$3 with hierarchy) (node with spacing) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 18:51 |
| S411 | 10 | (updat$3 with hierarchy) (node with spacing) parent | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:04 |
| S412 | 4 | "screen navigation editor" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 16:37 |
| S413 | 1 | 2004-315841.NRAN. | DERWENT | AND | ON | 2006/12/19 19:07 |
| S421 | 16 | Human machine interface screen naviga$4 config$5 designing collection linked hierarchically organized screen nodes HMI editor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:10 |
| S424 | 29 | Human machine interface screen navigat$3 config$5 design$3 collection link$3 hierarchical$2 organiz$2 screen node HMI editor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:12 |
| S425 | 22 | Human machine interface screen navigat$3 config$5 design$3 collection link$3 hierarchical$2 organiz$2 screen node HMI editor ((intersect$3 or overlap$3 or collide or collision) or (drag near3 drop)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:31 |

| S426 | 4 | Human machine interface screen navigat$3 config$5 design$3 collection link$3 hierarchical$2 organiz$2 screen node HMI editor (drag near3 drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:15 |
|------|----|-----|-----|-----|----|-----|
| S427 | 10 | hierarchical$2 node tree HMI editor (drag near3 drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:19 |
| S428 | 7 | hierarchical$2 node tree HMI editor (drag near3 drop) (parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:23 |
| S429 | 2 | hierarchical$2 node tree HMI editor (drag near3 drop) (parent with updat $3) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:24 |
| S430 | 2 | hierarchi$5 node tree HMI editor (drag near3 drop) (parent with (updat$3 or refresh or recreate or restore or regenerate or correct)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:32 |
| S432 | 5 | hierarchi$5 tree HMI (drag near3 drop) (node with (updat$3 or refresh or recreate or restore or regenerate or correct)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:33 |
| S433 | 5 | hierarchi$5 tree HMI (drag near3 drop) (node with (updat$3 or refresh$3 or recreat$3 or restor$3 or regenerat$3 or correct$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:37 |
| S434 | 0 | hierarchi$5 tree HMI (drag near3 drop) near3 (over or "on" or "top of")(node with (updat$3 or refresh$3 or recreat$3 or restor$3 or regenerat$3 or correct$3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:37 |
| S438 | 69 | hierarchi$5 tree (drag near3 drop) (node with (placement or arrangment or layout )) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:53 |

| S439 | 512 | hierarchi$5 tree (automatic $4 with parent) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:50 |
|------|-----|--------------------------------------------------------|---------------------------------------------------------|-----|----|-------------------|
| S440 | 25 | hierarchi$5 tree (drag near3 drop) (node with (placement or arrangment or layout )) (collide or collision or intersection) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:57 |
| S441 | 5 | hierarchi$5 tree (drag near3 drop) (node with (placement or arrangment or layout )) ((collide or collision or intersection) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:54 |
| S442 | 17 | hierarchi$5 tree (drag near3 drop) (automatic$4 with parent) (collide or collision or intersection) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 19:58 |
| S443 | 8 | hierarchi$5 tree (drag near3 drop) (automatic$4 with parent) ((collide or collision or intersection) with (node or parent or child or leaf)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 20:24 |
| S444 | 14 | hierarchi$5 tree (drag near3 drop) (automatic$4 with (node or parent or child or leaf)) ((collide or collision or intersection) with (node or parent or child or leaf)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 20:04 |
| S445 | 14 | hierarchi$5 tree (drag near3 drop) (automatic$4 with (node or parent or child or leaf)) ((collide or collision or intersection) near4 (node or parent or child or leaf)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 20:19 |
| S446 | 1 | hierarchi$5 tree (drag near3 drop) (automatic$4 with position with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 20:26 |

| S447 | 1 | hierarchi$5 tree (drag near3 drop) (automatic$4 with ($3position$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 20:48 |
|------|---|---|---|---|---|---|
| S448 | 2 | hierarchi$5 tree (drag near3 drop) (automatic$4 with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or (re adj locate) or (re adj locating) or order$3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting)) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 20:56 |
| S449 | 11 | hierarchi$5 tree (drag near3 drop) ((automatic$4 or recursiv$2 or spontaneous$2 or automated or reflexivly or impulsivly or voluntarly) with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or (re adj locate) or (re adj locating) or order$3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:03 |
| S450 | 11 | hierarchi$5 tree (drag near3 drop) ((automatic$4 or recursiv$2 or spontaneous$2 or automated or reflexivly or impulsivly or voluntarly) with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or situat$3 (re adj distrib$5) or (re adj locate) or (re adj locating) or order $3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:04 |

| S451 | 11 | hierarchi$5 tree (drag near3 drop) ((automatic$4 or recursiv$2 or spontaneous$2 or automated or reflexivly or impulsivly or voluntarily) with (position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or situat$3 (re adj distrib$5) or (re adj locate) or (re adj locating) or order $3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3 or distribut$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:06 |
|------|----|----|----|----|----|----|
| S452 | 66 | tree (node adj editor) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:06 |
| S453 | 7 | tree (node adj editor) layout | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:08 |
| S454 | 31 | tree (node adj editor) ((layout or position$3 or (re adj position) or (re adj positioning) or arrang$3 or dispos$3 or emplacement or plac$3 or fix$3 or locat $3 or situat$3 (re adj distrib$5) or (re adj locate) or (re adj locating) or order $3 or (re adj order) or (re adj ordering) placement or setting or (re adj setting) or adjust$4 or updat$3 or distribut$3) with parent with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:10 |
| S455 | 278 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:12 |

| S456 | 211 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:13 |
|---|---|---|---|---|---|---|
| S457 | 210 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally parent (child or leaf) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:12 |
| S458 | 211 | edit$3 parent (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:15 |
| S459 | 342 | edit$3 (position or location or layout or collection or arrangement) tree horizontal vertical (spacing or distanced or distancing) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:16 |
| S460 | 39 | edit$3 (position or location or layout or collection or arrangement) tree horizontal vertical ((spacing or distanced or distancing) same node) aligned node equally | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:19 |
| S461 | 1152 | 345/440.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:21 |
| S462 | 65 | (editing tree).ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:22 |
| S463 | 94 | (edit$3 tree).ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:35 |
| S464 | 1 | 1990-101229.NRAN. | DERWENT | AND | ON | 2006/12/19 21:37 |

| S465 | 1 | 345/440.ccls. 715/514.ccls. 715/764.ccls. 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:41 |
|------|----|------|------|------|------|------|
| S466 | 38 | 345/440.ccls. 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:42 |
| S467 | 4 | 345/440.ccls. 715/514.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 21:46 |
| S468 | 38 | 345/440.ccls. 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:34 |
| S469 | 2 | (update adj parent) node tree leaf spacing | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 22:10 |
| S470 | 10 | (update adj parent) node tree leaf distance | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 22:09 |
| S471 | 1 | (updating adj parent) node tree leaf spacing | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/19 22:10 |
| S472 | 11 | (updat$3 near3 parent) node tree leaf spacing | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 15:28 |

| S473 | 22 | (US-20030191608-$ or US-20020120921-$).did. or (US-6259458-$ or US-6054986-$ or US-5606654-$ or US-5432897-$ or US-5386459-$ or US-6067477-$ or US-6975914-$ or US-6889096-$ or US-6754885-$ or US-6618856-$ or US-7017116-$ or US-4914568-$ or US-5301301-$ or US-6862105-$ or US-6144962-$ or US-5911145-$ or US-6549221-$ or US-5870559-$ or US-6684264-$).did. or (JP-05307476-$).did. | US-PGPUB; USPAT; JPO | AND | ON | 2006/12/20 15:25 |
| S474 | 1007 | ("20010034659" \| "20020022900" \| "20030004874" \| "20030176940" \| "20030177046" \| "20030181991" \| "20040046997" \| "3665172" \| "3810119" \| "3825905" \| "4006464" \| "4064394" \| "4096566" \| "4141066" \| "4276593" \| "4302820" \| "4312068" \| "4315315" \| "4323966" \| "4347563" \| "4399513" \| "4410942" \| "4413314" \| "4423486" \| "4428044" \| "4435762" \| "4443861" \| "4455619" \| "4456997" \| "4466098" \| "4471457" \| "4488226" \| "4493027" \| "4524421" \| "4546435" \| "4570217" \| "4609995" \| "4613946" \| "4615001" \| "4628437" \| "4635183" \| "4639852" \| "4641269" \| "4641276" \| "4644478" \| "4644479" \| "4648064" \| "4649479" \| "4656603" \| "4658372" \| "4663704" \| "4672530" \| "4675812" \| "4677587" \| "4682158" \| "4682304" \| "4683530" \| "4692859" \| "4692918" \| "4695968" \| "4703421" \| "4704676" \| "4709325" \| "4710763" \| "4719593" \| "4727477" \| "4733366" \| "4742349" \| "4750109" \| "4754127" \| "4785408" \| "4790762" \| "4803039" \| "4805107" \| "4813013" \| "4816996" \| "4817094" \| | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 15:27 |

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"4897777" | "4897866" |
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"5151981" | "5159673" |
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| S476 | 33 | S474 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 15:32 |

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| S478 | 125 | S477 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 15:43 |
| S479 | 26 | S477 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) (intersect$3 or overlap $3 or collide or collision) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 15:44 |
| S480 | 11 | S477 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) ((intersect$3 or overlap$3 or collide or collision) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 15:45 |
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| | | | | | | |
|---|---|---|---|---|---|---|
| | | "5386394" \| "5394522" \| "5412772" \| "5418946" \| "5420968" \| "5426780" \| "5428744" \| "5459829" \| "5463773" \| "5467444" \| "5479597" \| "5504863" \| "5515486" \| "5515488" \| "5519865" \| "5526478" \| "5528735" \| "5546529" \| "5553163" \| "5555354" \| "5557714" \| "5559942" \| "5572640" \| "5592599" \| "5604821" \| "5619632" \| "5623590" \| "5634087" \| "5644740" \| "5659731" \| "5671333" \| "5671381" \| "5675711" \| "5675785" \| "5675786" \| "5678015" \| "5680476" \| "5684967" \| "5694524" \| "5696964" \| "5706495" \| "5715432" \| "5724573" \| "5727199" \| "5732230" \| "5737487" \| "5748852" \| "5751965" \| "5761664" \| "5761667" \| "5774669" \| "5786820" \| "5787274" \| "5802383" \| "5821937" \| "5861891" \| "5870768" \| "5877775" \| "5958008" \| "5966128" \| "6055539" \| "6067093" \| "B14555775").PN. OR ("5450535" \| "5590250" \| "5877766" \| "6067093" \| "6111578" \| "6137493" \| "6137499" \| "6219053" \| "6259451" \| "6259458" \| "6922692").URPN. | | | | |
| S482 | 7 | S481 (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) with (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) ((intersect$3 or overlap$3 or collide or collision) with node) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 15:51 |
| S483 | 101 | S477 S481 | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 15:55 |
| S484 | 67 | (hierarchical display).ti. | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 15:56 |

| S485 | 31 | (hierarchical near3 display) (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) ((intersect$3 or overlap$3 or collide or collision) with node) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 15:59 |
|------|-----|-----|-----|-----|-----|-----|
| S486 | 6 | (edit$3 with hierarchical near3 display) (((parent or root or (top adj level) or (top adj most) or father or mother) near3 node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom$3)) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 16:00 |
| S487 | 8 | (edit$3 with hierarchical near3 display) (((parent or root) with node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom$3)) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 16:01 |
| S488 | 54 | (edit$3 with (hierarchical or tree) near3 display) (((parent or root) with node) same (updat$3 or position$3 or locat$3 or place$4 or new or becom $3)) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 16:02 |
| S489 | 3 | (edit$3 with (hierarchical or tree) near3 display) (((parent or root) with node) with ((intersect$3 or overlap$3 or collide or collision) with node)) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 16:06 |
| S491 | 207 | ((hierarchical or tree)) (((parent or root or top) with node) with ((drag$3 adj over) or drop)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 16:11 |
| S492 | 2 | ((hierarchical or tree)) (((parent or root or top) with node) near5 ((drag$3 adj over) or (drop adj over))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 16:13 |
| S493 | 152 | ((hierarchical or tree)) (((parent or root or top) with node) near5 ((drag$3 or drop$3))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 16:13 |

| S494 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 22:52 |
|------|------|------|------|------|------|------|
| S495 | 504 | detect$4 (collision with between with nodes) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:38 |
| S496 | 222 | detect$4 same (collision with between with nodes) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:38 |
| S497 | 2 | "7035898".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:38 |
| S498 | 2 | (((hierarchical or tree)) (((parent or root or top) with node) with (drag adj over)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:45 |
| S499 | 10887 | (hierarchic$5 tree) (editor or editing or modifying) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:58 |
| S500 | 53 | (hierarchic$5 tree) (re adj position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:58 |
| S501 | 32 | (hierarchic$5 tree) (re adj position) node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 17:59 |
| S502 | 794 | 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:34 |

| S503 | 307 | 715/853.ccls. (updat$3 (parent or node or root)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:34 |
| S504 | 42 | 715/853.ccls. (updat$3 near3 (parent or node or root)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:41 |
| S505 | 13 | 715/853.ccls. (reorder) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:42 |
| S506 | 112 | 715/853.ccls. shift | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:43 |
| S507 | 3 | 715/853.ccls. (vertical adj tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:00 |
| S508 | 127 | 715/853.ccls. ((node or root or parent) with position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:44 |
| S509 | 89 | 715/853.ccls. ((node or root or parent) near3 position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:45 |
| S510 | 14 | 715/853.ccls. (adjust near3 position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:48 |
| S511 | 75 | 715/853.ccls. (node near3 position) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 18:52 |

| S512 | 35 | 715/853.ccls. ((intersection OR overlap or collide or collision or intersection or junction or overlap or cover or overlie) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:05 |
|------|-----|------|------|------|------|------|
| S513 | 32 | 715/853.ccls. ((intersection OR overlap or collide or collision or intersection or junction or overlap or covering or overlie) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:06 |
| S514 | 24 | 715/853.ccls. ((intersection OR overlap or collide or collision or intersection or junction or overlap or overlie) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:12 |
| S515 | 2 | "5911145".pn. automatic $5 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:07 |
| S516 | 47 | 715/853.ccls. (node near3 automatic$4) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:28 |
| S517 | 0 | 715/853.ccls. (node near3 automatic$4) with insert | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:10 |
| S518 | 2 | 715/853.ccls. (node near3 automatic$4) with drop | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:11 |
| S519 | 5 | 715/853.ccls. (node with automatic$4 with drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:12 |
| S520 | 55 | (node with automatic$4 with ((intersection or overlap or collide or collision or intersection))) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:13 |

| S521 | 1257 | drop adj node | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:13 |
|------|------|---------------|---------------------------------------------------------|-----|-----|-------------------|
| S522 | 70 | (drop adj node) editor | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:16 |
| S523 | 103 | (Tree adj View adj Control) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 19:23 |
| S524 | 363 | (shift with (parent or root or node) with right) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:04 |
| S525 | 125 | (shift with (parent or root or node) with right) tree | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:04 |
| S526 | 10 | 715/853.ccls. Collision | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:30 |
| S527 | 1 | 715/853.ccls. (Collision with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:30 |
| S528 | 33 | 715/853.ccls. ((Collision or overlap$3 or intersec$4) with node) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:36 |
| S529 | 34 | 715/853.ccls. ((Collision or overlap$3 or intersec$4) with object) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:39 |

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|---|---|---|---|---|---|---|
| S530 | 15 | 715/853.ccls. (adjusting with position ) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:49 |
| S531 | 211 | 715/853.ccls. layout | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:50 |
| S532 | 142 | S531 automatic$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:49 |
| S533 | 6 | 715/853.ccls. (layout with automatic) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:50 |
| S534 | 15 | 715/853.ccls. (layout with automatic$4) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:53 |
| S535 | 144 | (vertical adj tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:53 |
| S536 | 28 | (vertical adj tree) (horizontal adj tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 20:53 |
| S537 | 55 | ("4606002" \| "4611272" \| "4945475" \| "5058144" \| "5202986" \| "5230047" \| "5257365" \| "5293616" \| "5295261" \| "5333317" \| "5377281" \| "5392363" \| "5404510" \| "5418947" \| "5487166" \| "5488717" \| "5495609" \| "5497485" \| "5528701" \| "5530957" \| "5534861" \| "5551027" \| "5557786" \| "5560007" \| "5644763" \| "5649023" \| | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 20:56 |

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|---|---|---|---|---|---|---|
| | | "5651099" \| "5664172" \| "5694591" \| "5701467" \| "5717921" \| "5737732" \| "5752243" \| "5761652" \| "5765168" \| "5768423" \| "5781772" \| "5787430" \| "5799184" \| "5799299" \| "5809296" \| "5832182" \| "5842196" \| "5848416" \| "5873087" \| "5884297" \| "5963956" \| "5970170" \| "6014659" \| "6041053" \| "6153591" \| "6175835" \| "6208993" \| "6240418").PN. OR ("6675173").URPN. | | | | |
| S538 | 71 | (visual adj tree) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:00 |
| S539 | 347 | (dynamic near3 (tree or hierarchy)) visual | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:01 |
| S540 | 192 | (dynamic near3 (tree or hierarchy)) editor | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:01 |
| S541 | 409 | (dynamic near3 (tree or hierarchy)) edit$3 | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:01 |
| S542 | 9 | (dynamic near3 (tree or hierarchy)) with edit$3 | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:03 |
| S543 | 27 | (tree or hierarchy) (relocate near3 node) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:15 |
| S544 | 45 | (tree near3 structure near3 editor) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:35 |
| S545 | 37 | ("4075689" \| "4318184" \| "4447875" \| "4468728" \| "4611298" \| "4613946" \| "4656603" \| "4677550" \| "4710763" \| "4763277" \| "4764867" \| "4813010" \| "4817036" \| "4831525" \| "4860204" \| "4866635" \| "4868743").PN. OR ("5493678").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:22 |
| S546 | 137 | (become near3 new near3 parent) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:26 |
| S547 | 80 | (become near3 new near3 parent) (tree or hierarchy) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:32 |
| S548 | 89 | (become near3 new near3 parent) (tree or hierarch$4) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:32 |
| S549 | 154 | (become near3 new near2 (parent or root)) (tree or hierarch$4) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:33 |
| S550 | 183 | ((tree adj structure) near3 edit$3) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:36 |
| S551 | 142 | (tree adj structure) near3 (editor or editing) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 22:20 |

| S552 | 24 | (tree adj structure) near3 (editor or editing) (drag$3 with drop$3) | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 21:44 |
|---|---|---|---|---|---|---|
| S553 | 9 | (NetObjects).as. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 22:11 |
| S554 | 14 | (Arora Samir).inv. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:31 |
| S556 | 4 | ("5911145" \| "6237006" \| "6282454" \| "6421571"). PN. | USPAT | AND | ON | 2007/04/02 10:51 |
| S561 | 24 | (US-20020120921-$ or US-20030191608-$).did. or (US-4914568-$ or US-5432897-$ or US-5606654-$ or US-5870559-$ or US-5911145-$ or US-6054986-$ or US-6067477-$ or US-6144962-$ or US-6259458-$ or US-6549221-$ or US-6618856-$ or US-6684264-$ or US-6754885-$ or US-6889096-$ or US-6975914-$ or US-7017116-$ or US-5386459-$ or US-6862105-$ or US-6067093-$ or US-5493678-$ or US-5812135-$).did. or (JP-05307476-$).did. | US-PGPUB; USPAT; JPO | AND | ON | 2006/12/20 23:39 |
| S562 | 127 | S508 position | US-PGPUB; USPAT; JPO | AND | ON | 2006/12/20 23:39 |
| S563 | 20 | S561 position | US-PGPUB; USPAT; JPO | AND | ON | 2006/12/20 23:41 |
| S564 | 7 | S561 (position near3 node) | US-PGPUB; USPAT; JPO | AND | ON | 2006/12/20 23:46 |
| S565 | 2 | S561 (relocat$3 near3 node) | US-PGPUB; USPAT; JPO | AND | ON | 2006/12/20 23:46 |
| S566 | 18 | ("4524421" \| "4613946" \| "4710763" \| "4841292" \| "5333254" \| "5557714" \| "5592599" \| "5619632" \| "5774669" \| "5786820" \| "5877775").PN. OR ("6259458").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2006/12/20 23:48 |

| S567 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2006/12/20 23:54 |
|---|---|---|---|---|---|---|
| S568 | 2 | hierarchi$5 node tree HMI (drag near3 drop) (parent with (updat$3 or refresh or recreate or restore or regenerate or correct)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/02 09:23 |
| S569 | 98 | (Industrial plant).ti. | USPAT | AND | ON | 2007/04/02 10:52 |
| S570 | 549 | (Industrial plant).ab. | USPAT | AND | ON | 2007/04/02 10:52 |
| S571 | 522 | (Industrial plant).clm. | USPAT | AND | ON | 2007/04/02 10:52 |
| S572 | 151 | (Industrial adj plant).clm. | USPAT | AND | ON | 2007/04/02 10:52 |
| S573 | 223 | (Industrial adj plant).clm. | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:52 |
| S574 | 48 | (Industrial adj plant).ti. | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:52 |
| S575 | 9 | (Industrial adj plant).ti. vertical horizontal | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:53 |
| S576 | 30 | (Industrial plant).ti. vertical horizontal | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:54 |
| S577 | 5 | (Industrial plant).ti. vertical horizontal GUI | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:59 |
| S578 | 5 | S577 position | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:59 |
| S579 | 5 | S577 parent position | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:59 |
| S580 | 5 | S577 (parent same position) | US-PGPUB; USPAT | AND | ON | 2007/04/02 10:59 |
| S581 | 5 | S577 (parent with position) | US-PGPUB; USPAT | AND | ON | 2007/04/02 11:00 |
| S582 | 0 | S577 (parent with adjusting) recursivlyu | US-PGPUB; USPAT | AND | ON | 2007/04/02 11:02 |
| S583 | 6 | HMI adj user adj screens | US-PGPUB; USPAT | AND | ON | 2007/04/02 11:25 |
| S584 | 63 | HMI adj screens | US-PGPUB; USPAT | AND | ON | 2007/04/02 11:30 |
| S585 | 28 | (HMI adj screens) parent | US-PGPUB; USPAT | AND | ON | 2007/04/02 12:38 |
| S586 | 3 | (HMI adj screens) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2007/04/02 12:39 |
| S587 | 0 | (process wtih visualization) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2007/04/02 15:20 |

| S588 | 144 | (process wit\h visualization) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2007/04/02 12:40 |
|---|---|---|---|---|---|---|
| S589 | 144 | (process with visualization) (drag with drop) | US-PGPUB; USPAT | AND | ON | 2007/04/02 12:40 |
| S590 | 84 | (process with visualization) (drag with drop) hierarchy | US-PGPUB; USPAT | AND | ON | 2007/04/02 13:10 |
| S591 | 3 | (process with visualization) (Supervisory adj Control adj system) (drag with drop) hierarchy | US-PGPUB; USPAT | AND | ON | 2007/04/02 13:11 |
| S592 | 1 | 2004-315841.NRAN. | DERWENT | AND | ON | 2007/04/02 13:13 |
| S593 | 1 | 2004-315841.NRAN. | DERWENT | AND | ON | 2007/04/02 13:13 |
| S594 | 51568 | process visualization | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/02 15:19 |
| S595 | 41 | (process with visualization) (drag with drop) editor | US-PGPUB; USPAT | AND | ON | 2007/04/02 15:20 |
| S596 | 915 | hmi process | US-PGPUB | AND | ON | 2007/04/02 15:37 |
| S600 | 174 | (industrial process).ti. | US-PGPUB | AND | ON | 2007/04/02 15:39 |
| S601 | 1746 | (industrial process).clm. | US-PGPUB | AND | ON | 2007/04/02 15:40 |
| S602 | 416 | (industrial near process).clm. | US-PGPUB | AND | ON | 2007/04/02 15:40 |
| S603 | 381 | (industrial adj process).clm. | US-PGPUB | AND | ON | 2007/04/02 15:40 |
| S604 | 15 | (industrial adj process).clm. GUI | US-PGPUB | AND | ON | 2007/04/02 15:40 |
| S605 | 0 | (industrial adj process).clm. GUI editor.ti. | US-PGPUB | AND | ON | 2007/04/02 15:40 |
| S608 | 3 | (process editor).ti. | US-PGPUB | AND | ON | 2007/04/02 15:41 |
| S609 | 10 | (hmi with editor) "715".clas. | US-PGPUB | AND | ON | 2007/04/02 15:43 |
| S610 | 25 | (hmi with editor) | US-PGPUB | AND | ON | 2007/04/02 15:44 |
| S611 | 22 | (hmi with editor) position | US-PGPUB | AND | ON | 2007/04/02 15:46 |
| S612 | 28 | ((hmi or (human adj machine adj interface)) with edit$3) position | US-PGPUB | AND | ON | 2007/04/02 15:47 |

| S613 | 5 | ((hmi or (human adj machine adj interface)) with edit$3) position (dragged with top) | US-PGPUB | AND | ON | 2007/04/02 15:48 |
|---|---|---|---|---|---|---|
| S618 | 188 | 715/967.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 13:44 |
| S619 | 39 | 715/967.ccls. industrial | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 13:44 |
| S620 | 19 | 715/967.ccls. industrial (drag or drop) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 13:45 |
| S621 | 19 | 715/967.ccls. industrial (drag or drop) | US-PGPUB; USPAT | AND | ON | 2007/04/03 13:45 |
| S622 | 52 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) | US-PGPUB; USPAT | AND | ON | 2007/04/03 13:46 |
| S623 | 11 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) parent node | US-PGPUB; USPAT | AND | ON | 2007/04/03 13:46 |
| S624 | 5 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) parent same node | US-PGPUB; USPAT | AND | ON | 2007/04/03 13:46 |
| S625 | 5 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drag or drop) (parent same node) | US-PGPUB; USPAT | AND | ON | 2007/04/03 13:55 |
| S626 | 1 | "5905989".pn. | US-PGPUB; USPAT | AND | ON | 2007/04/03 13:50 |
| S627 | 73 | ("4591983" \| "4628435" \| "4644479" \| "4719586" \| "4803039" \| "4815014" \| "4839823" \| "4853175" \| "4855923" \| "4858102" \| "4947095" \| "5068080" \| "5099436" \| "5119318" \| "5148363" \| "5161110" \| "5189604" \| "5195029" \| "5214577" \| "5216612" \| "5239547" \| "5249260" \| "5251144" \| "5267141" \| "5305426" \| "5333240" \| "5355444" \| "5398304" \| | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 13:54 |

| | | "5402526"   "5403447"   "5406502"   "5412756"   "5414632"   "5442562"   "5463545"   "5463567"   "5511004"   "5521844"   "5541832"   "5557549"   "5559691"   "5561610"   "5617514"   "5630025"   "5659743").PN. OR ("5905989").URPN. | | | | |
|------|-----|-----------------------------------------------------------------|----------------------|-----|-----|------------------------|
| S631 | 21  | ((715/967.ccls.) OR (715/771.ccls.)) (parent with node) | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:06 |
| S632 | 10  | ((715/967.ccls.) OR (715/771.ccls.)) (parent with node) hierarchy | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:14 |
| S633 | 9   | ((715/967.ccls.) OR (715/771.ccls.)) (parent with position) | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:21 |
| S635 | 6   | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:22 |
| S636 | 6   | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) parent node | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:22 |
| S637 | 2   | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) parent node recursively | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:23 |
| S638 | 2   | ((715/967.ccls.) OR (715/771.ccls.)) (parent adj node) recursively | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:23 |
| S639 | 125 | industrial (parent adj node) recursively | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:24 |
| S640 | 115 | industrial (parent adj node) recursively (not (INDUSTRIAL adj APPLICABILITY)) | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:24 |
| S641 | 6   | industrial plant (parent adj node) recursively | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:23 |
| S642 | 1   | (10/196007).APP. | USPAT; USOCR | AND | ON | 2007/04/03 14:25 |
| S643 | 2   | (industrial with plant) (automated with controller) (recursively with update) | US-PGPUB; USPAT | AND | ON | 2007/04/03 14:29 |
| S644 | 2   | "20040128120".pn. or "20040073404".pn. | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:42 |
| S645 | 225 | (node with collision) industrial | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:43 |
| S646 | 36  | (node with collision) industrial plant | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:44 |

| S647 | 13 | (node with overlap) industrial plant | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:44 |
|------|-----|------|------|-----|-----|------|
| S648 | 8 | ((715/967.ccls.) OR (715/771.ccls.)) industrial (drop with top) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:47 |
| S650 | 1 | ((715/967.ccls.)) (drop with top) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:48 |
| S651 | 45 | (drop same (updat$3 with hierarchy)) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:51 |
| S652 | 10 | (automated adj machine adj controller) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:58 |
| S653 | 1192 | (automated )(machine adj controller) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:53 |
| S654 | 276 | (automated )(machine adj controller) cell control | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:53 |
| S655 | 276 | (automated )(machine adj controller) (cell control) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:54 |
| S656 | 3 | (automated )(machine adj controller) (cell adj control) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:54 |
| S657 | 2 | (715/967.ccls.) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:55 |
| S658 | 1 | (industrial near3 plant) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:37 |
| S659 | 15 | ((manufactur$3 or industrial or automation) near3 plant) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2007/04/03 16:57 |
| S660 | 25 | ((manufactur$3 or industrial or automation or process$3) near3 plant) (updat$3 with hierarchy) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:06 |
| S661 | 27 | (vertical adj tree) (horizontal adj tree) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:09 |
| S662 | 2099 | (vertical$5 with tree) (horizontal$5 with tree) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:10 |
| S663 | 99 | (vertical$5 with tree) (horizontal$5 with tree) (drag$4 drop$4) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:10 |
| S664 | 7 | (vertical$5 with tree) (horizontal$5 with tree) (drag$4 drop$4) ((manufactur$3 or industrial or automation or process$3) near3 plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:32 |
| S665 | 10 | industrial plant (drag adj drop) recursively | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:30 |
| S666 | 15 | "6282455" | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:28 |

| S667 | 2 | industrial plant (drag adj drop) (recursively with updat$3) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:31 |
|---|---|---|---|---|---|---|
| S668 | 38 | industrial plant (drag drop) (recursive$3) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:31 |
| S669 | 14 | industrial plant (drag drop) (recursive$3) tree | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:32 |
| S670 | 2 | industrial ((drag drop) same (recursive$3)) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:33 |
| S671 | 21 | industrial ((drag or drop) same (recursive$3)) | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:33 |
| S672 | 1 | "7165226".pn. | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:37 |
| S673 | 3 | "6,889,096" | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 17:43 |
| S674 | 20 | ("20050004781" \| "5072412" \| "5247433" \| "6189019" \| "6587108" \| "6795798" \| "6888554" \| "6889096" \| "6947798" \| "6966033").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 17:53 |
| S675 | 10 | ("20050004781" \| "5072412" \| "5247433" \| "6189019" \| "6587108" \| "6795798" \| "6888554" \| "6889096" \| "6947798" \| "6966033").PN. | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:53 |
| S676 | 1 | "6477435".pn. | US-PGPUB; USPAT | AND | ON | 2007/04/03 17:58 |
| S677 | 8 | ("5812394" \| "5822206" \| "6161051").PN. OR ("6477435").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 18:28 |
| S678 | 1 | "20060256084".pn. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 18:31 |
| S679 | 3 | ("5546521" \| "5777616" \| "6347800").PN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 18:31 |
| S680 | 3 | ("6055369" \| 20010029506" \| "5926180").pn. | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:05 |
| S681 | 2 | "6421571".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:09 |

| S682 | 62 | ("4399513" \| "4413314" \| "4644479" \| "4803039" \| "4872121" \| "4985857" \| "5202828" \| "5291416" \| "5311562" \| "5559691" \| "5602757" \| "5623109" \| "5631825" \| "5675752" \| "5719796" \| "5748881" \| "5822743" \| "5826251" \| "5838588" \| "5854994" \| "5859885" \| "5870698" \| "5877961" \| "5899990" \| "5905985" \| "5905989" \| "5918225" \| "5963884" \| "5995916" \| "RE31750"). PN. OR ("6421571").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 19:12 |
|------|-----|------|------|------|------|------|
| S683 | 3 | S682 drag drop | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 19:21 |
| S684 | 140 | (Industrial plant).ti. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/03 19:22 |
| S685 | 31 | (Industrial plant).ti. | US-PGPUB | AND | ON | 2007/04/03 19:27 |
| S686 | 51 | "5911145" | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:29 |
| S687 | 3 | "5911145" industrial | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:30 |
| S688 | 45 | "5911145" process | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:30 |
| S689 | 33 | "5911145" process control | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:31 |
| S690 | 10 | "5911145" process with control | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:31 |

| S691 | 7 | (vertical$5 with tree) (horizontal$5 with tree) (drag$4 drop$4) ((manufactur$3 or industrial or automation or process$3 or scada) near3 plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:33 |
|---|---|---|---|---|---|---|
| S692 | 2 | "6282454".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/03 19:36 |
| S693 | 1 | "6282454".pn. | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:36 |
| S694 | 22 | (US-20030028269-$ or US-20030101021-$ or US-20030191608-$ or US-20030023518-$).did. or (US-6054986-$ or US-4914568-$ or US-6975914-$ or US-6854111-$ or US-6067477-$ or US-6754885-$ or US-6618856-$ or US-7017116-$ or US-6259458-$ or US-6067093-$ or US-5606654-$ or US-5432897-$ or US-6144962-$ or US-5870559-$ or US-5493678-$ or US-6549221-$ or US-6684264-$ or US-5812135-$).did. | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:39 |
| S695 | 1 | S694 drag with top | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:42 |
| S696 | 25 | ("4812996" \| "4868785" \| "4884228" \| "5136705" \| "5155836" \| "5481741" \| "5630164" \| "5812394" \| "5966532" \| "5991537" \| "5309352" \| "5801942" \| "5828851" \| "5838563" \| "5970471" \| "6053951" \| "6061057" \| "6064816" \| "6098028" \| "6173438" \| "6219628" \| "6785805" \| "6083267" \| "6167383" \| "6339763").PN. | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:48 |
| S697 | 15 | S696 (drop or drag) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:54 |
| S698 | 0 | industrial (recursively with update with (hierarchy or tree)) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:54 |
| S699 | 0 | industrial (recursively same update with (hierarchy or tree)) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:54 |

| S700 | 0 | industrial (recursively same (update with (hierarchy or tree))) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:54 |
|---|---|---|---|---|---|---|
| S701 | 30 | (recursively same (update with (hierarchy or tree))) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:58 |
| S702 | 6 | (update with (hierarchy or tree)) (industrial plant).ab. | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:58 |
| S703 | 2 | (recursively with updat$3) hierarchy (drag$3 or drop $3) (industrial adj plant | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:59 |
| S704 | 2 | (recursively with updat$3) hierarchy (drag$3 or drop $3 or "on top of") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:59 |
| S705 | 2 | (recursively with updat$3) hierarchy (drag$3 or drop $3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 19:59 |
| S706 | 64 | (updat$3) hierarchy (drag $3 or drop$3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 20:00 |
| S707 | 0 | ((updat$3) with hierarchy) (drag$3 or drop$3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 20:00 |
| S708 | 8 | ((updat$3) with (hierarchy or tree or link)) (drag$3 or drop$3 or "on top") (industrial adj plant) | US-PGPUB; USPAT | AND | ON | 2007/04/03 20:01 |
| S709 | 2839 | (industrial adj plant).ab. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 18:04 |
| S710 | 247 | (industrial adj plant).ab. | US-PGPUB; USPAT | AND | ON | 2007/04/05 16:44 |
| S711 | 526 | (715/965.ccls. or 715/966. ccls. or 715/967.ccls. or 715/969.ccls. or 715/970. ccls.) | US-PGPUB; USPAT | AND | ON | 2007/04/05 18:18 |
| S712 | 96 | S711 industrial | US-PGPUB; USPAT | AND | ON | 2007/04/05 16:50 |
| S713 | 30 | S712 Hierarchic$4 | US-PGPUB; USPAT | AND | ON | 2007/04/05 18:04 |
| S714 | 17 | S713 (drag$3 or drop$3) | US-PGPUB; USPAT | AND | ON | 2007/04/05 16:51 |
| S715 | 36 | S712 Hierarch$6 | US-PGPUB; USPAT | AND | ON | 2007/04/05 17:39 |

| S716 | 56 | "715".clas. (parent with overlap) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 17:49 |
|---|---|---|---|---|---|---|
| S717 | 12 | (automated adj machine adj controller) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 18:04 |
| S718 | 132 | (automated with ( machine adj controller)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 18:04 |
| S719 | 2 | (industrial adj plant) (automated with ( machine adj controller)) (hmi or mmi) Hierarchic$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 18:12 |
| S720 | 3 | (industrial adj plant) iconic $4 Hierarchic$4 | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 18:14 |
| S721 | 12886 | ((human adj machine adj interface) or (HMI) or (man adj machine adj interface)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/05 18:17 |
| S722 | 8903 | ((human adj machine adj interface) or (HMI) or (man adj machine adj interface)) | US-PGPUB; USPAT | AND | ON | 2007/04/05 18:18 |
| S723 | 3845 | S722 calcula$4 | US-PGPUB; USPAT | AND | ON | 2007/04/05 18:19 |
| S724 | 19 | ("5812135").URPN. | USPAT | AND | ON | 2007/04/05 19:30 |

| S725 | 24 | (US-20030023518-$ or US-20030028269-$ or US-20030101021-$ or US-20030191608-$).did. or (US-6854111-$ or US-5432897-$ or US-7017116-$ or US-6053951-$ or US-6975914-$ or US-5870559-$ or US-6054986-$ or US-6144962-$ or US-6684264-$ or US-6549221-$ or US-5812135-$ or US-4914568-$ or US-5606654-$ or US-5838563-$ or US-6618856-$ or US-6754885-$ or US-6067093-$ or US-5493678-$ or US-6067477-$ or US-6259458-$).did. | US-PGPUB; USPAT | AND | ON | 2007/04/05 19:40 |
| S726 | 11 | S725 industrial | US-PGPUB; USPAT | AND | ON | 2007/04/05 19:40 |
| S727 | 2 | "US 20030036873" | US-PGPUB; USPAT; USOCR; DERWENT | AND | ON | 2007/04/05 19:47 |
| S728 | 1 | "20030036873".pn. | DERWENT | AND | ON | 2007/04/05 19:47 |
| S729 | 1 | 2003-456454.NRAN. | DERWENT | AND | ON | 2007/04/05 19:47 |
| S730 | 3 | ( ONLINE CONFIGURATION MEASUREMENT SYSTEM).ti. | DERWENT | AND | ON | 2007/04/05 19:49 |
| S731 | 1 | 2003-466375.NRAN. | DERWENT | AND | ON | 2007/04/05 19:50 |
| S732 | 1 | 2003-466375.NRAN. | DERWENT | AND | ON | 2007/04/05 19:50 |
| S733 | 6 | ( ONLINE MEASUREMENT SYSTEM).ti. | US-PGPUB | AND | ON | 2007/04/05 19:50 |
| S734 | 10 | ("2003/0036871").URPN. | USPAT | AND | ON | 2007/04/05 19:51 |
| S735 | 45 | ("20020144282" \| "20030036871" \| "20030036874" \| "20030036875" \| "20030036876" \| "20030058280" \| "20030066065" \| "20030163298" \| "4812996" \| "4868785" \| "4884228" \| "5136705" \| "5155836" \| "5481741" \| "5630164" \| "5752042" \| "5812394" \| "5845077" \| "5966532" \| "5970471" \| "5974454" \| "5991537" \| | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:12 |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | "6049789" \| "6053951" \| "6064816" \| "6074434" \| "6083267" \| "6098028" \| "6105063" \| "6167383" \| "6173438" \| "6219628" \| "6266774" \| "6269456" \| "6339763" \| "6367077" \| "6493871" \| "6535911" \| "6681351" \| "6701513" \| "6732296" \| "6751794" \| "6785805").PN. OR ("6889172").URPN. | | | | |
| S736 | 23 | S735 (drop$3 or drag$3) | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:16 |
| S737 | 11 | S735 (drop$3 or drag$3) position | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:21 |
| S738 | 35 | "715".clas. (industrial with process)(drop$3 or drag $3) position parent | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:22 |
| S739 | 9 | "715".clas. (industrial with process)(drop$3 or drag $3) position parent ((virtual adj instrument) or (virtual adj panel)) | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:25 |
| S740 | 11 | "715".clas. (industrial with process)(drop$3 or drag $3) position parent ((virtual adj instrument) or (virtual adj panel) or (screen adj node)) | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:30 |
| S741 | 27 | ("4812996" \| "4868785" \| "4884228" \| "5136705" \| "5155836" \| "5309352" \| "5481741" \| "5630164" \| "5801942" \| "5812394" \| "5828851" \| "5838563" \| "5966532" \| "5970471" \| "5991537" \| "5861882" \| "6053951" \| "6061057" \| "6064816" \| "6083267" \| "6098028" \| "6167383" \| "6173438" \| "6219628" \| "6339763" \| "6078320" \| "6985876").PN. | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:33 |
| S742 | 26828 | ((Configur$3 or edit$3) (Process adj Control)) | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:34 |
| S743 | 10 | ((Configur$3 or edit$3) (Process adj Control)).ti. | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:39 |

| S744 | 79 | ("3665172" | "4006464" | "4302820" | "4413314" | "4443861" | "4639852" | "4641269" | "4663704" | "4672530" | "4682158" | "4704676" | "5121318" | "5124908" | "5129087" | "5140677" | "5164894" | "5168441" | "5202961" | "5251125" | "5307346" | "5309556" | "5371895" | "5377315" | "5384910" | "5392389" | "5394522" | "5408603" | "5420977" | "5426732" | "5428734" | "5432711" | "5437007" | "5444851" | "5452201" | "5459825" | "5461710" | "5467264" | "5475856" | "5481741" | "5485620" | "5491791" | "5500934" | "5504672" | "5504902" | "5513095" | "5519605" | "5530643" | "5546301" | "5549137" | "5550980" | "5559691" | "5566320" | "5576946" | "5594858" | "5621871" | "Re33162").PN. OR ("5940294").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:38 |
|---|---|---|---|---|---|---|
| S745 | 2 | S744 S743 | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:39 |
| S746 | 87 | S744 or S743 | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/05 20:39 |
| S747 | 10 | ((Configur$3 or edit$3) ((industrial adj plant) or (Process adj Control))).ti. | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:39 |
| S748 | 87 | S747 or S746 | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:39 |
| S749 | 25 | S748 collection | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:41 |
| S750 | 34 | S748 node | US-PGPUB; USPAT | AND | ON | 2007/04/05 20:41 |
| S751 | 11 | S748 node parent | US-PGPUB; USPAT | AND | ON | 2007/04/05 21:06 |
| S752 | 6 | S751 drag$3 | US-PGPUB; USPAT | AND | ON | 2007/04/05 21:13 |
| S753 | 4 | S752 overlap | US-PGPUB; USPAT | AND | ON | 2007/04/05 21:13 |
| S754 | 16 | ("20030232176" | "4290248" | "4721589" | "5007818" | "5149193" | "5362222" | "5812394" | "6156842").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 09:56 |

| S755 | 3 | ("6904387").PN. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 09:54 |
|------|------|------|------|------|------|------|
| S756 | 2 | "20040024657".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 09:59 |
| S757 | 2 | "6853920".pn. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:00 |
| S758 | 182337 | Siemens.as. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:00 |
| S759 | 97 | Siemens.as. HMI | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:00 |
| S760 | 9 | Siemens.as. HMI parent | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:14 |
| S761 | 866 | ((man or human) adj machine adj interface).clm. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:15 |
| S762 | 206 | ((man or human) adj machine adj interface).clm. industrial | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:15 |
| S763 | 91 | ((man or human) adj machine adj interface).clm. industrial graphical | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:15 |
| S764 | 31 | ((man or human) adj machine adj interface).clm. industrial graphical hierarchy | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:16 |

| S765 | 1 | ((man or human) adj machine adj interface).clm. industrial graphical hierarchy (equal$4 adj spac $3) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:18 |
|------|-----|------|------|------|------|------|
| S766 | 15 | ((man or human) adj machine adj interface).clm. industrial graphical hierarchy parent | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:46 |
| S767 | 11 | ((man or human) adj machine adj interface) industrial graphical hierarchy parent hmi scada visualization | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 14:47 |
| S768 | 1101 | (Rockwell Automation).as. | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 10:51 |
| S769 | 8 | hmi objects | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 11:07 |
| S770 | 3 | (intelligent adj hmi) objects | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/06 11:08 |
| S771 | 74 | ((man or human) adj machine adj interface) industrial graphical hierarch $5 parent hmi | US-PGPUB; USPAT | AND | ON | 2007/04/06 11:36 |
| S772 | 76 | yufeng.inv. | US-PGPUB; USPAT | AND | ON | 2007/04/06 11:36 |
| S773 | 29 | (vertical adj tree) (horizontal adj tree) | US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 14:54 |
| S774 | 824 | 715/853.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:11 |
| S775 | 175 | 715/853.ccls. vertical horizontal | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:14 |

| S776 | 2 | (715/855.ccls. or 715/854. ccls. or 715/853.ccls.) vertical horizontal vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:09 |
|---|---|---|---|---|---|---|
| S777 | 77 | 715/858.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:11 |
| S778 | 695 | 715/854.ccls. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:14 |
| S779 | 2 | 715/854.ccls. vertical horizontal vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:15 |
| S780 | 0 | 715/854.ccls. (vertical$4 near2 (hierarchy or tree)) (horizontal$4 near2 (hierarchy or tree)) vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:15 |
| S781 | 0 | (vertical$4 near2 (hierarchy or tree)) (horizontal$4 near2 (hierarchy or tree)) vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:16 |
| S782 | 510 | (vertical$4 near2 (hierarchy or tree)) (horizontal$4 near2 (hierarchy or tree)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:20 |
| S783 | 34 | S782 "715".clas. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:20 |
| S784 | 3 | (vertical$4 with (hierarchy or tree)) (horizontal$4 with (hierarchy or tree)) VRML | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:24 |

| S785 | 3 | (vertical$4 with (hierarchy or tree or (layout tree))) (horizontal$4 with (hierarchy or tree or (layout tree))) VRML | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:25 |
|------|------|------|------|------|------|------|
| S786 | 165 | tree.ti. "715".clas. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:28 |
| S787 | 40 | tree.ti. "715".clas. horizontal | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:28 |
| S788 | 0 | (vrml with hierarch$5) HMI | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:32 |
| S789 | 62 | (vrml with hierarch$5) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:32 |
| S790 | 0 | (vrml with (hierarch$5 OR tree)) HMI | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:33 |
| S791 | 101 | (vrml with (hierarch$5 OR tree)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:35 |
| S792 | 7004 | (types! with tree) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:35 |
| S793 | 434 | (types! with tree) "715".clas. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:37 |

| S794 | 15 | (types! with tree) "715". clas. vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:35 |
|------|-----|------|------|------|------|------|
| S795 | 18 | vrml.ti. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:36 |
| S796 | 10305 | (vertical$4 horizont$5) same (tree or hierarch$6) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:38 |
| S797 | 20 | ((vertical$4 horizont$5) same (tree or hierarch$6)) vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:49 |
| S798 | 12 | ((vertical$4 horizont$5) vrml (spaced with equal $5)) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:50 |
| S799 | 2 | "5911145".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 15:53 |
| S800 | 53 | ("5446837" \| "5632022" \| "5634062" \| "5634095" \| "5644736" \| "5644740" \| "5701137" \| "5745360" \| "5748186").PN. OR ("5911145").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/09 15:54 |
| S801 | 5883 | 345/419.ccls. 345/420.ccls. 345/421.ccls. 345/422.ccls. 345/423.ccls. 345/424.ccls. 345/425.ccls. 345/426.ccls. 345/427.ccls. | US-PGPUB; USPAT; USOCR | OR | ON | 2007/04/09 15:55 |
| S802 | 1 | 1998-130869.NRAN. | DERWENT | AND | ON | 2007/04/09 16:45 |
| S803 | 13 | ("5302103" \| "5736080" \| "5852722" \| "6137408" \| "6275741" \| "6393807" \| "6466154").PN. OR ("6684264").URPN. | US-PGPUB; USPAT; USOCR | AND | ON | 2007/04/09 16:19 |

| S804 | 442 | arora.inv. | DERWENT | AND | ON | 2007/04/09 16:45 |
|------|-----|-----------|---------|-----|-----|------------------|
| S805 | 0 | (arora samir).inv. | DERWENT | AND | ON | 2007/04/09 16:45 |
| S806 | 14 | (arora samir).inv. | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:47 |
| S807 | 70 | horizontal vertical hierarchy arrangement VRML | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:48 |
| S808 | 0 | (horizontal adj (tree or layout or arrangement or configuration or hierarchy)) (vertical adj (tree or layout or arrangement or configuration or hierarchy)) VRML | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:54 |
| S809 | 1805 | (horizontal adj (tree or layout or arrangement or configuration or hierarchy)) (vertical adj (tree or layout or arrangement or configuration or hierarchy)) | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:57 |
| S810 | 3 | S809 HMI | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:55 |
| S811 | 36 | S809 industrial plant | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:55 |
| S812 | 2792 | (horizontal same vertical same tree) | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:57 |
| S813 | 183 | (horizontal same vertical same tree) industrial | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:57 |
| S814 | 70 | (horizontal same vertical same tree) industrial rotate | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:58 |
| S815 | 52 | (horizontal same vertical same tree) industrial rotate aligned | US-PGPUB; USPAT | AND | ON | 2007/04/09 16:58 |
| S816 | 2 | "5420977".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 17:12 |
| S817 | 38 | hmi same html | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 17:23 |

| S818 | 0 | hmi same vrml | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 17:12 |
| S819 | 2 | "6615091".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 17:24 |
| S820 | 74 | (HMI with development ) | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 17:25 |
| S821 | 34 | S820 html | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 17:25 |
| S822 | 2 | "6282455".pn. | US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB | AND | ON | 2007/04/09 19:00 |